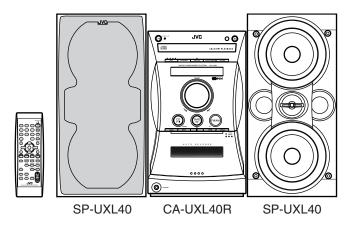
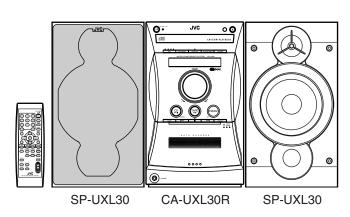
# JVC

# SERVICE MANUAL

## MICRO COMPONENT SYSTEM

## UX-L40R/UX-L30R









Area Suffix	
B U.K E Continental Europo EN Northem Europo EV Eastem Europo	e e

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### Safety Precautions

- 1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- 2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
- 3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (1) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- 4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
- 5. Leakage currnet check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

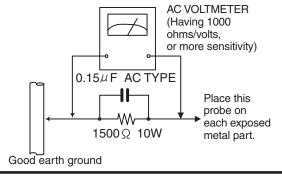
Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500  $\Omega$  10W resistor paralleled by a 0.15 $\mu$ F AC-type capacitor

between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



### Warning

- 1. This equipment has been designed and manufactured to meet international safety standards.
- 2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- 3. Repairs must be made in accordance with the relevant safety standards.
- 4. It is essential that safety critical components are replaced by approved parts.
- 5. If mains voltage selector is provided, check setting for local voltage.

#### **CAUTION** -

Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

(This regulation does not correspond to J and C version.)

### Safety precautions (U.K only) -

- 1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits.
- 2. Any unauthorised design alterations or additions will void the manufacturer's guarantee; furthermore the manufacturer cannot accept responsibility for personal injury or property damage resulting therefrom.
- 3. Essential safety critical components are identified by ( \( \underset \) ) on the Parts List and by shading on the schematics, and must never be replaced by parts other than those listed in the manual. Please note however that many electrical and mechanical parts in the product have special safety related characteristics. These characteristics are often not evident from visual inspection. Parts other than specified by the manufacturer may not have the same safety characteristics as the recommended replacement parts shown in the Parts List of the Service Manual and may create shock, fire, or other hazards.
- 4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

### -*Warning* -

- 1. Service should be performed by qualified personnel only.
- 2. This equipment has been designed and manufactured to meet international safety standards.
- 3. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- 4. Repairs must be made in accordance with the relevant safety standards.
- 5. It is essential that safety critical components are replaced by approved parts.
- 6. If mains voltage selector is provided, check setting for local voltage.

<u>AUTION</u> Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

### **Preventing static electricity**

#### 1. Grounding to prevent damage by static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

**2.About the earth processing for the destruction prevention by static electricity** Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players.

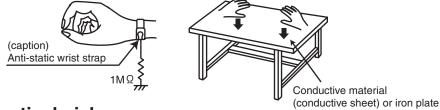
Be careful to use proper grounding in the area where repairs are being performed.

#### 2-1 Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

#### 2-2 Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



#### 3. Handling the optical pickup

- 1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- 2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

### 4. Handling the traverse unit (optical pickup)

- 1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
- 2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
- 3. Handle the flexible cable carefully as it may break when subjected to strong force.

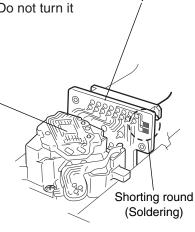
4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

### Attention when traverse unit is decomposed

\*Please refer to "Disassembly method" in the text for pick-up and how to detach the substrate.

CD pickup

- Solder is put up before the card wire is removed from connector on the CD substrate as shown in Figure.
  - (When the wire is removed without putting up solder, the CD pick-up assembly might destroy.)
- Please remove solder after connecting the card wire with when you install picking up in the substrate.



Pickup board

### Important for laser products

#### 1.CLASS 1 LASER PRODUCT

2.DANGER: Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

- **3.CAUTION**: There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.
- **4.CAUTION**: The compact disc player uses invisible laserradiation and is equipped with safety switches whichprevent emission of radiation when the drawer is open and the safety interlocks have failed or are de feated. It is dangerous to defeat the safety switches.

**5.CAUTION:** If safety switches malfunction, the laser is able to function.

6.CAUTION: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

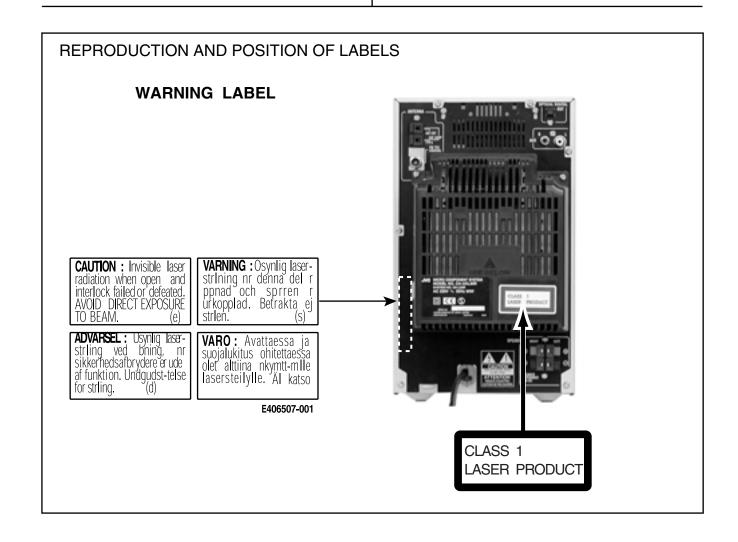
↑ CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

VARNING: Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

**VARO** : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen.

ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL: Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.



## **Disassembly method**

### <Main body>

■Removing the Metal cover

(See Fig.1 to 3)

- 1. Remove the six screws **A** on the back of the main body.
- 2. Remove the screw **B** on each side and remove the cover in the direction of the arrow.





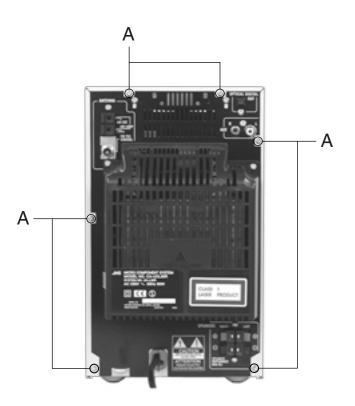


Fig.1(UX-L30RE)

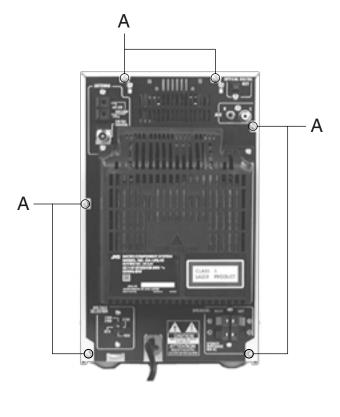


Fig.1(UX-L40RE)

#### ■Removing the Rear cover

(See Fig.4)

- · Remove the metal cover.
- 1. Remove the two screws C retaining the rear cover.

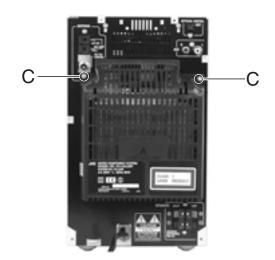


Fig.4(UX-L30RE)

#### ■Removing the Rear panel

(See Fig.5)

- · Remove the metal cover and the rear cover.
- Remove the ten screws **D** retaining the rear panel.
   Release the two joints **a** on the rear side and the joint **b** on each side.(UX-L30RE)
- 1. Remove the twelve screws **D** retaining the rear panel. Release the two joints **a** on the rear side and the joint **b** on each side.(UX-L40RE)

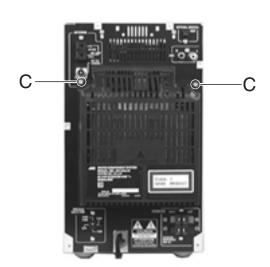


Fig.4(UX-L40RE)

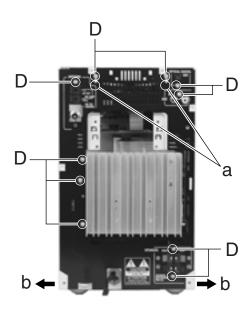


Fig.5(UX-L30RE)

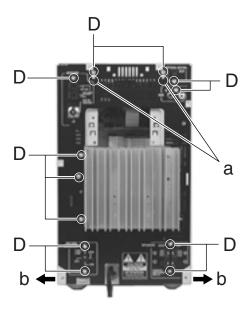


Fig.5(UX-L40RE)

#### ■ Removing the Tuner board

(See Fig.6)

- · Remove the metal cover.
- 1. Disconnect the card wire from connector CN1 on the tuner board.
- 2. Remove the two screws **E** on the rear side and the screw **F** on the side.

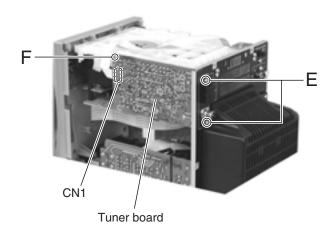


Fig.6

## ■ Removing the Optical digital board (See Fig.7)

- · Remove the metal cover.
- 1. Disconnect the shield wire from connector CN905 on the optical digital board.
- 2. Remove the screw **G** on the rear side and the screw **H** on the upper side.

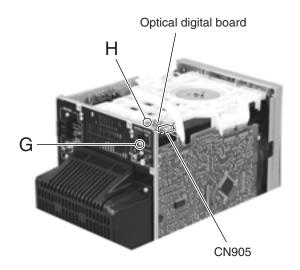


Fig.7

## ■Removing the CD-R/RW mechanism assembly

(See Fig.8)

- Remove the metal cover, the rear cover, the rear panel, the tuner board and the optical digital board.
- 1. Disconnect the card wire from connector CN903 and CN904 on the main board.
- 2. Pull the joint **c** in the direction of the arrow and remove the CD-R/RW mechanism assembly backward while releasing the joint **d**.

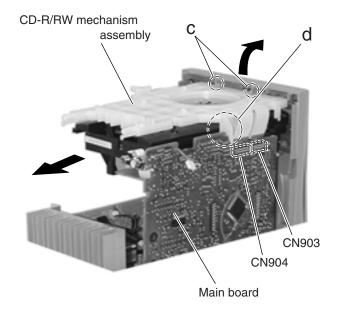


Fig.8

## ■ Removing the Main board/ the Heat sink board (See Fig.9 to 11)

- Remove the metal cover, the rear cover and the rear panel.
- Disconnect the card wire from connector CN902, CN903, CN904 and CN905 on the main board and remove the CD-R/RW mechanism assembly.

REFERENCE: Refer to the method of removing the CD-R/RW mechanism assembly and Fig. 8.

- 2. Remove the two screws I to remove the main board.
- 3. Disconnect the card wire from connector CN931, CN935, CN933, CN934, CN913, CN901, CN900, CN917 and CN918 on the main board.(UX-L30RE)
- 3. Disconnect the card wire from connector CN931, CN935, CN933, CN934, CN913, CN901, CN900 and CN917 on the main board.(UX-L40RE)
- 4. Remove the band f and disconnect the card wire from connector CN951 on the power transformer assembly. Remove the main board / the heat sink board from the body.
- Release the joint e of the main board and disconnect connector CN944 and CN945 of the heat sink board from connector CN915 and CN916 of the main board respectively.

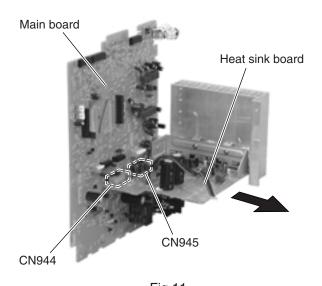
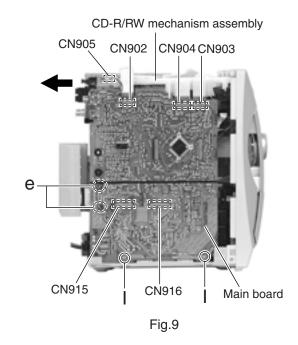


Fig.11



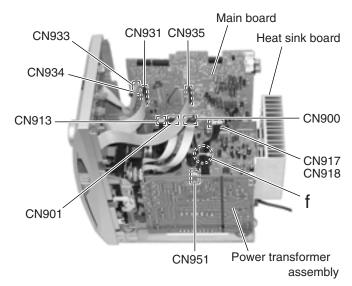


Fig.10(UX-L30RE)

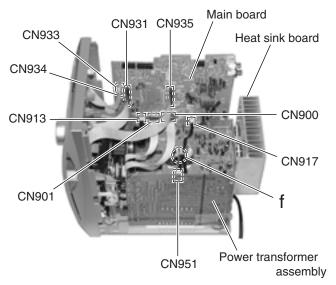


Fig.10(UX-L40RE)

## ■Removing the Power transformer assembly (See Fig.12)

- Remove the metal cover, the rear cover, the rear panel, the CD-R/RW mechanism assembly and the main board.
- 1. Disconnect the power cord from connector J1000 on the power transformer assembly.
- 2. Remove the four screws J.

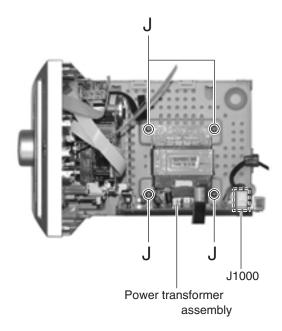
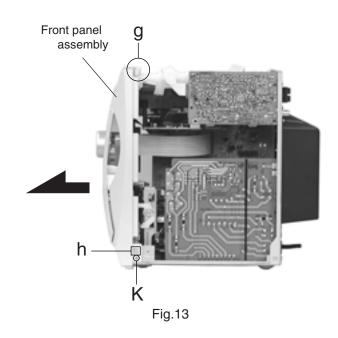


Fig.12

## ■ Removing the Front panel assembly (See Fig.13 to 16)

- · Remove the metal cover.
- 1. Remove the screw  ${\bf K}$  on each side. Pull the joint  ${\bf h}$  on both sides and lift the front panel assembly to release the joint  ${\bf g}$ .
- 2. Disconnect connector CN931, CN935, CN933 and CN934 on the main board.
- 3. Disconnect the card wire from connector CN33 and CN34 on the cassette mechanism board.



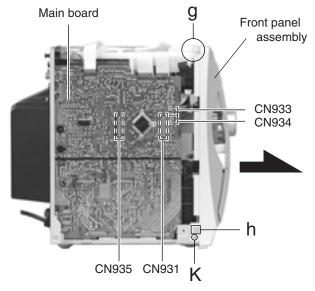


Fig.14



Fig.15

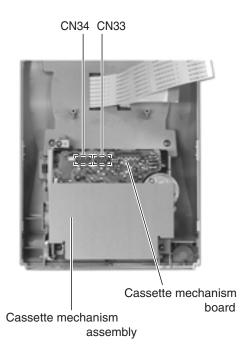


Fig.16

#### **■**Removing the Phones board

(See Fig.17)

- Prior to performing the following procedure, remove the metal cover and the front panel assembly.
- 1. Disconnect connector CN913 on the main board.

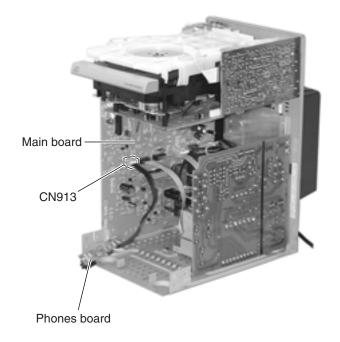


Fig.17

## ■ Removing the Cassette mechanism assembly (See Fig.18)

- Prior to performing the following procedure, remove the metal cover and the front panel assembly.
- 1. Remove the four screws  ${\bf L}$  retaining the cassette mechanism assembly.

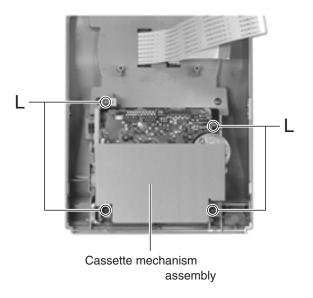


Fig.18

#### ■ Removing the Control board

(See Fig.19)

- Prior to performing the following procedure, remove the metal cover and the front panel assembly.
- 1. Remove the seven screws  ${\bf M}$  to remove the control board.

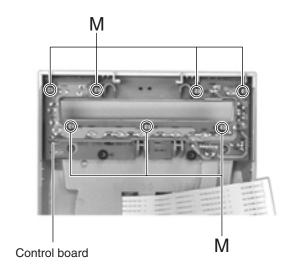


Fig.19

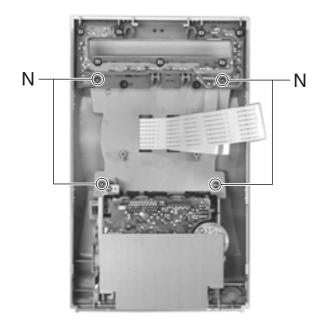


Fig.20

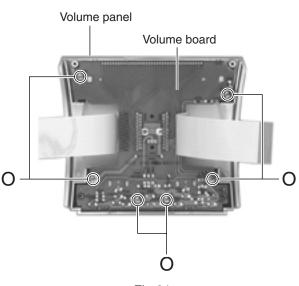


Fig.21

## ■ Removing the Volume board (See Fig.20 and 21)

- Prior to performing the following procedure, remove the metal cover and the front panel assembly.
- 1. Remove the four screws **N** attaching the volume panel on the front panel assembly.
- 2. Remove the six screws **O** attaching the volume board on the volume panel, and remove the volume board.

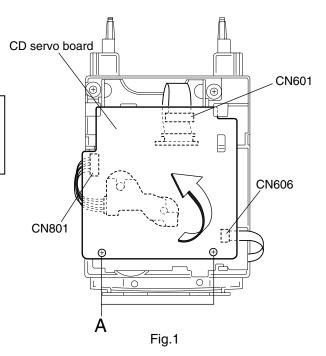
### <CD mechanism assembly section>

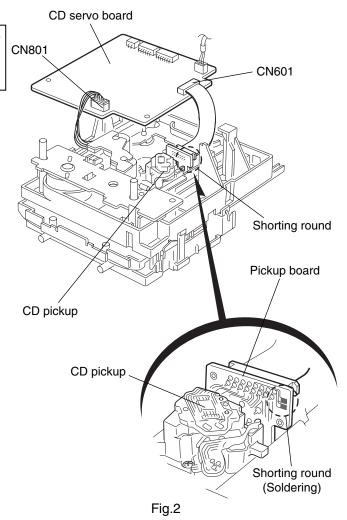
## ■Removing the CD servo board (See Fig.1, 2)

CAUTION: Solder the shorting round before disconnecting the card wire extending from the pickup. If you do not follow this instruction, the pickup may be damaged.

- 1. Remove the two screws **A** on the bottom of the loading base.
- 2. Disconnect the card wire from connector CN606 on the CD servo board. Turn over the CD servo board as shown in Fig.2 and put aside temporarily.
- 3. Solder the shorting round on the pickup board in the CD pickup section.
- 4. Disconnect the card wire from connector CN601 and the wire from CN801 on the CD servo board.

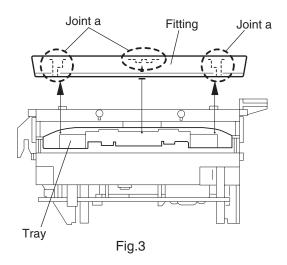
CAUTION: When reassembling, make sure to unsolder the shorting round after connecting the card wire from the pickup to the connector.





## ■ Removing the clamper base / tray (See Fig.3 ~ 5)

- 1. Bring up the fitting in the direction of the arrow to release the three joints **a**.
- 2. On the front side of the body, move the cam plate lever to the center.
- 3. Remove the stopper screw **B** and pull out the tray toward the front.
- 4. Remove the two screws **C** attaching the clamper base.
- 5. From the rear side, remove the clamper base upward.



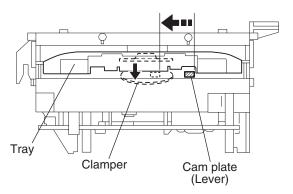
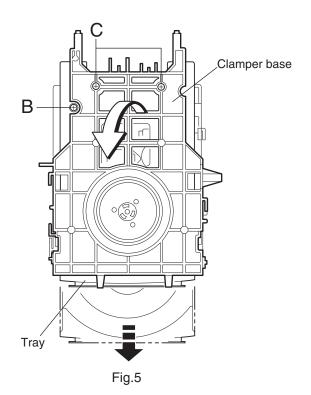


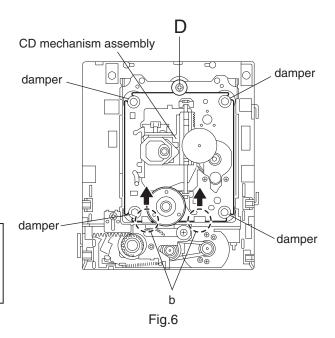
Fig.4



## ■ Removing the CD mechanism assembly (See Fig.6, 7)

- Prior to performing the following procedure, remove the clamper base / tray and the CD servo board.
- 1. Remove the screw **D** attaching the CD mechanism assembly.
- 2. Move the CD mechanism assembly backward to release the two joints **b** of the CD base on the front side.

CAUTION: When reassembling, fit the front part of the CD mechanism assembly to the two chassis joints **b** and attach the four dampers correctly.



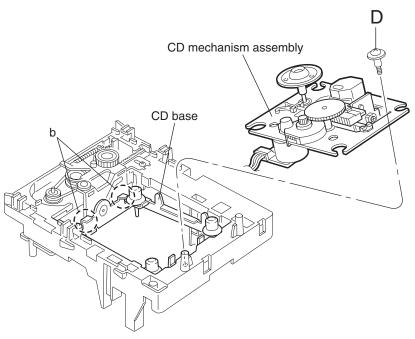
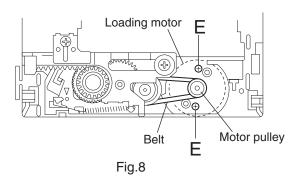


Fig.7

## ■Removing the loading motor / loading motor board (See Fig.8, 9)

- Prior to performing the following procedure, remove the clamper base / tray and the CD servo board.
- 1. From upside of the loading base, remove the belt from the motor pulley.
- 2. Remove the two screws **E** attaching the loading motor.
- At the bottom of the body, release the three joints c outward and pull out the loading motor board from the shaft. The loading motor comes off with the loading board.
- 4. Unsolder the two soldered points **d** on the loading motor board and remove the loading motor.

REFERENCE: When removing the loading motor board only, unsolder the two soldering **d** on the loading motor and release the three joints **c**.



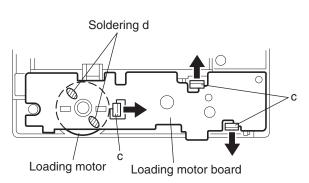
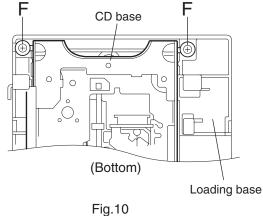


Fig.9

#### ■ Removing the C.D. gear (1), (2) and (3) (See Fig.10 ~ 13)

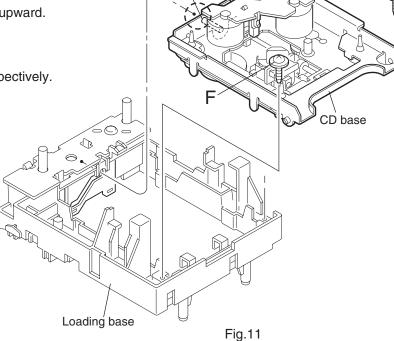
- · Prior to performing the following procedure, remove the CD servo board.
- 1. Remove the two screws **F** attaching the CD base on the bottom of the loading base.
- 2. Remove the rear part of the CD base upward and pull out the shaft **e** of the CD base from the camplate on the front side of the loading base.

REFERENCE: The CD mechanism assemly comes off with the CD base.

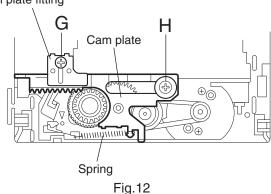


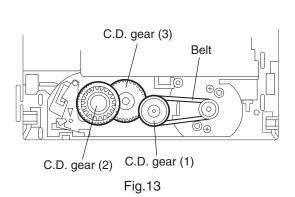
CD mechanism assembly

- 3. Remove the leaf spring on the upside of the loading
- 4. Remove the screw **G** attaching the cam plate fitting.
- 5. Remove the screw **H** and the cam plate upward.
- 6. Remove the belt from the C.D. gear (1).
- 7. Pull out the C.D. gear (1), (2) and (3) respectively.





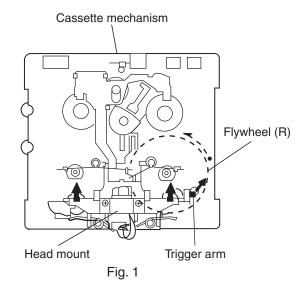




#### <Cassette mechanism section>

## ■ Removing the playback / recording & eraser head (See Fig. 1 ~ 3)

- 1. While shifting the trigger arms seen on the right side of the head mount in the arrow direction, turn the flywheel R in counterclockwise direction until the head mount has gone out with a click (See Fig. 1).
- 2. When the flywheel (R) is rotated in counterclockwise direction, the playback / recording & eraser head will be turned in counterclockwise direction from the position in Fig. 2 to that in Fig. 3.
- At this position, disconnect the flexible P.C. board (outgoing from the playback / recording & eraser head) from the connector CN31 on the head amplifier & mechanism control P.C. board.
- 4. Remove the flexible P.C. board from the chassis base.
- 5. Remove the spring **a** from behind the playback / recording & eraser head.
- 6. Loosen the reversing azimuth screw retaining the playback / recording & eraser head.
- 7. Take out the playback / recording & eraser head from the front of the head mount.
- 8. The playback / recoring & eraser head should also be removed similarly according to steps 1 to 7 above.



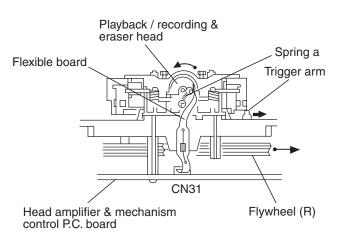


Fig. 2

## ■ Reassembling the playback / recording & eraser head (See Fig.2, 3)

- 1. Reassemble the playback head from the front of the head mount to the position as shown in Fig. 3.
- 2. Fix the reversing azimuth screw.
- Set the spring 1 from behind the playback / recording & eraser head.
- 4. Attach the flexible P.C. board to the chassis base, as shown in Fig. 3.
- 5. The playback / recording & eraser head should also be reassembled similarly to step 1 to 4 above.

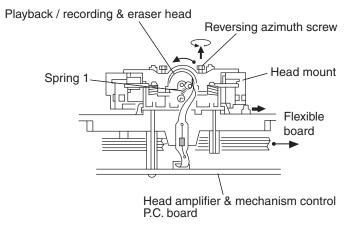


Fig. 3

## ■ Removing the head amplifier & mechanism control board (See Fig. 4)

- 1. Remove the cassette mechanism assembly.
- After turning over th cassette mechanism assembly, remove the three screws A retaining the head amplifier & mechanism control board.
- 3. Disconnect the connector CN32 on the board including the connector CN1 on the reel pulse P.C. board.
- 4. When necessary, remove the 4 pin parallel wire Head amplifier & mechanism continues and the main motor.

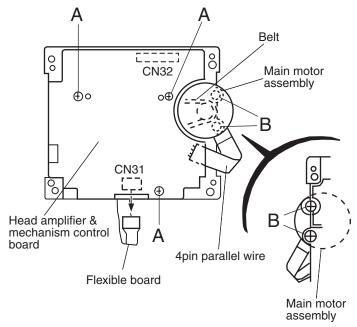


Fig. 4

## ■ Removing the main motor assembly (See Fig.4 ~ 6)

- 1. Remove the two screws **B** retaining the main motor assembly (See Fig. 4 and 4a).
- 2. While raising the main motor, remove the capstan belt from the motor pulley (See Fig. 4a).

CAUTION: Be sure to handle the capstan belt so carefully that this belt will not be stained by grease and other foreign matter.

Moreover, this belt should be hanged while referring to the capstan belt hanging method in Fig. 5 and 6.

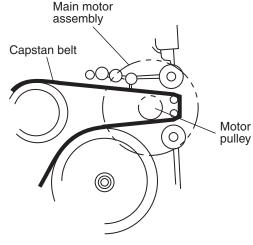


Fig. 4a

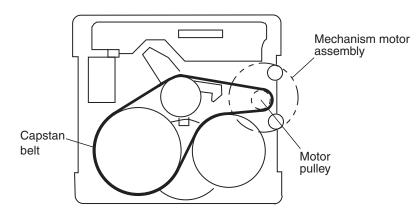


Fig. 5

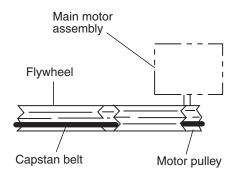
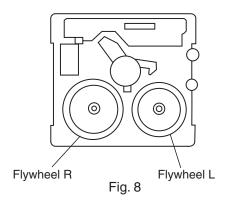
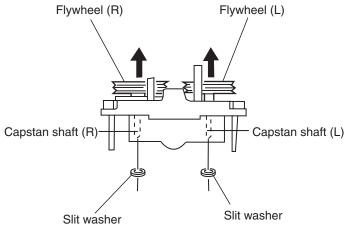


Fig. 6

#### ■Removing the flywheel (See Fig. 7, 8)

- Remove the head amplifier & mechanism control P.C. board.
- 2. Remove the main motor assembly.
- After turning over the cassette mechanism, remove the two slit washers and fixing the capstan shafts R and L, and pull out the flywheel (R) and (L) respectively from behind the cassette mechanism.

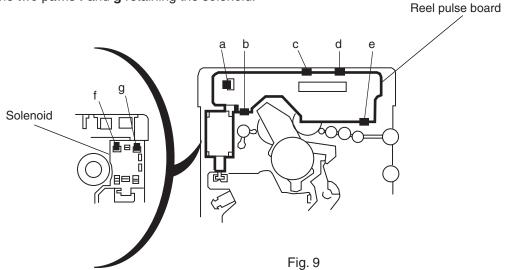




#### Fig. 7

## ■ Removing the reel pulse P.C. board and solenoid (See Fig. 9)

- 1. Remove the five pawls **a** to **e** reattaining the reel pulse board.
- 2. From the surface of the reel pulse board parts, remove the two pawls **f** and **g** retaining the solenoid.



### **Adjustment method**

#### Measurement Instruments Required for Adjustment

1. Low frequency oscillator

This oscillator should have a capacity to output 0dBs to 600  $\,\Omega$  at an oscillation frequency of 50Hz-20kHz.

- 2. Attenuator impedance : 600  $\Omega$
- 3. Electronic voltmeter
- 4. Distortion meter
- 5. Frequency counter
- 6. Wow & flutter meter
- 7. Test tape

VTT703L: Head azimuth

VT712 : Tape speed and running unevenness

(3kHz)

VT724 : Reference level (1kHz)

8. Blank tape

TYPE I: AC-225 TYPE II: AC-514

 Torque gauge : For play and back tension FWD(TW2111A), REV(TW2121a) and FF/REW(TW2231A)

10. Test disc: CTS-1000

#### ■ Measurement conditions

Power supply voltage

: AC230V (50Hz)

Reference output : Speaker :  $0.775V/4\Omega$ 

: Headphone :  $0.077V/32\Omega$ 

Reference frequency and

input level ------ 1kHz, AUX : -8dBs Measurement output terminal ----- at Speaker J3002 % Load resistance ------  $4\Omega$ 

#### Radio Input signal

AM frequency 400Hz
AM modulation 30%
FM frequency 400Hz
FM frequency deviation 22.5kHz

#### Tuner section

FM Band cover: 87.5~108MHz MW Band cover: 522~1,629kHz LW Band cover: 144~288kHz

Voltage applied to tuner ------ +B: DC5.7V VT: DC 12V

Reference measurement

output ----- 26.1mV(0.28V)/3  $\Omega$  Input positions ----- AM : Standard loop antenna

FM: TP1 (hot) and TP2 (GND)

#### Standard measurement position of volume

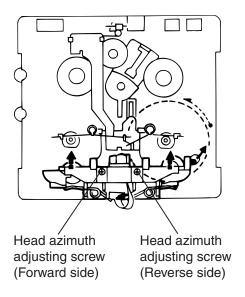
Function switch	to Tape
Beat cut switch	
Super Bass/Active hyper Bass	to OFF
Bass Treble	to Center
Adjustment of main volume to reference	output
-	VOL : 28

#### Precautions for measurement

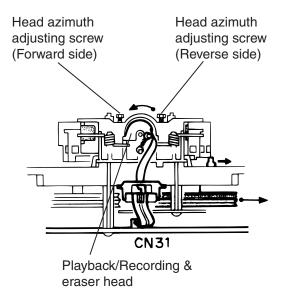
- 1. Apply 30pF and 33k  $\Omega$  to the IF sweeper output side and 0.082  $\mu$  F and 100k  $\Omega$  in series to the sweeper input side.
- 2. The IF sweeper output level should be made as low as possible within the adjustable range.
- 3. Since the IF sweeper is a fixed device, there is no need to adjust this sweeper.
- 4. Since a ceramic oscillator is used, there is no need to perform any MIX adjustment.
- 5. Since a fixed coil is used, there is no need to adjust the FM tracking.
- 6. The input and output earth systems are separated. In case of simultaneously measuring the voltage in both of the input and output systems with an electronic voltmeter for two channels, therefore, the earth should be connected particularly carefully.
- 7. In the case of BTL connection amp., the minus terminal of speaker is not for earthing. Therefore, be sure not to connect any other earth terminal to this terminal. This system is of an BTL system.
- 8. For connecting a dummy resistor when measuring the output, use the wire with a greater code size.
- 9. Whenever any mixed tape is used, use the band pass filter (DV-12).

#### << Arrangement of Adjusting Position>>

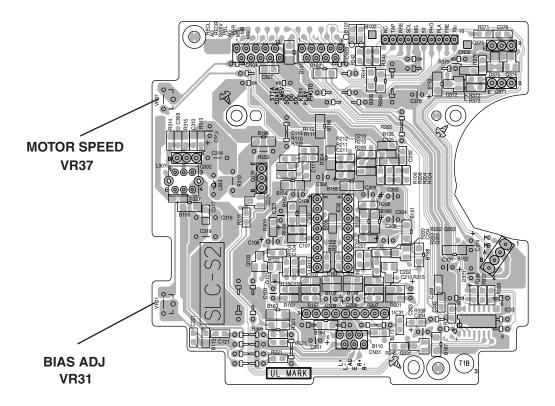
#### **Cassette mechanism section**



#### Cassette mechanism section (Back side)



#### **Cassette AMP board**



#### **■** Tape Recorder Section

Items	Measurement conditions	Measurement method			
Confirmation of head angle	Test tape : VTT703L (8kHz) Measurement output terminal : Speaker terminal Speaker R (Load resistance: 4Ω) : Headphone terminal	<ol> <li>Playback the test tape VTT703L (8kHz)</li> <li>With the recording &amp; playback mechanism, adjust the head azimuth screw so that the forward and reverse output levels become maximum. After adjustment, lock the head azimuth at least by half turn.</li> <li>In either case, this adjustment should be performed in both the forward and reverse directions with the head azimuth screw.</li> </ol>	·	Adjust the head azimuth screw only when the head has been changed.	
Confirmation of tape speed	Test tape : VT712 (3kHz) Measurement output terminal : Headphone terminal	Adjust VR37 so that the frequency counter reading becomes 2,940~3,090Hz $\pm$ when playing back the test tape VT712 (3kHz) with playback and recording mechanism after ending forward winding of the tape.	Tape speed of deck : 2,940 ~ 3,090Hz	VR37	

#### ■ Reference Values for Confirmation Items

Items	Measurement conditions	Measurement method	Standard Values	Adjusting positions	
Difference between the forward and reverse speed	Test tape : VT712 (3kHz) Measurement output terminal : Speaker terminal Speaker R (Load resistance: 4 Ω) Measurement output terminal : Headphone	When the test tape VT712 (3kHz) has been played back with the recording and playback mechanism at the beginning of forward winding, the frequency counter reading of the difference between both of the mechanism should be 6.0Hz or less.	6.0Hz or less	Head azimuth screw	
Wow & flutter	Test tape : VT712 (3kHz) Measurement output terminal : Headphone terminal	When the test tape VT712 (3kHz) has been played back with the recording and playback mechanism at the beginning of forward winding, the frequency counter reading of wow & flutter should be 0.25% or less (WRMS).	0.25% or less (WRMS)		

#### **■** Electrical Performance

Items	Measurement conditions	Measurement method						Measurement method				
Adjustment of recording bias current (Reference Value)	Mode: Forward or reverse mode     Recording mode     Test tape     AC-514 to TYPE II and AC-225 to TYPE I Measurement output terminal     Both recording and headphone terminals	<ol> <li>With the recording and playback mechanism, load the test tapes (AC-514 to TYPE II and AC-225 to TYPE I), and set the mechanism to the recording and pausing condition in advance.</li> <li>After connecting 100 Ω in series to the recorder head, measure the bias current with a valve voltmeter at both of the terminals.</li> <li>After resetting the [PAUSE] mode, start recording. At this time, adjust VR31 for Lch and VR32 for Rch so that the recording bias current values become 4.0 μ A (TYPE II) and 4.20 μ A (TYPE II).</li> </ol>	AC-514 : 4.0 μA	VR31								
recording and playback frequency	Reference frequency : 1kHz and 10kHz (REF.: -20dB) Test tape : AC-514 to TYPE II Measurement input terminal : OSC IN	<ol> <li>With the recording and playback mechanism, load the test tapes (AC-514 to TYPE II), and set the mechanism to the recording and pausing condition in advance.</li> <li>While repetitively inputting the reference frequency signal of 1kHz and 10kHz from OSC IN, record and playback the rape.</li> <li>While recording and playback the test tape in TYPE II, adjust VR31 for Lch and VR32 for Rch so that the output deviation between 1kHz and 10kHz becomes -1dB±2dB.</li> </ol>	between 1kHz and 10kHz :-1dB±2dB	VR31								

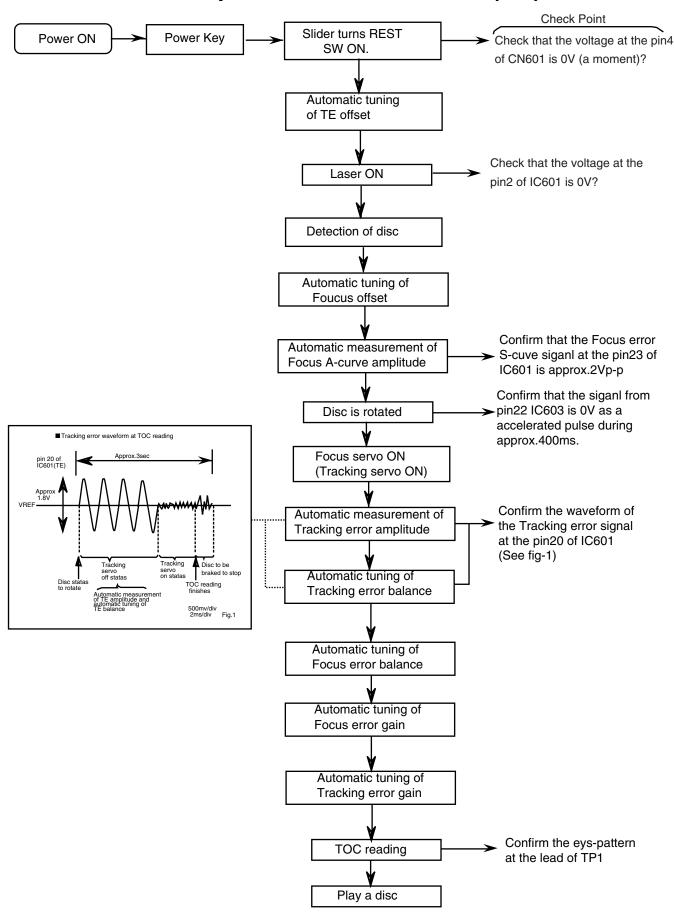
#### ■ Reference Values for Electrical Function Confirmation Items

Items	Measurement conditions	Measurement method	Standard Values	Adjusting positions
Recording bias frequency	Forward or reverse     Test tape     TYPE II (AC-514)     Measurement terminal : BIAS TP on P.C. board	<ol> <li>While changing over to and from BIAS 1 and 2, confirm that the frequency is changed.</li> <li>With the recording and playback mechanism, load the test tape.         (AC-514 to TYPE II), and set the mechanism to the recording and pausing condition in advance.</li> <li>Confirm that the BIAS TP frequency on the P.C. board is 100kHz ± 6kHz.</li> </ol>	100 kHz ±6 kHz	
Eraser current (Reference value)	Forward or reverse Recording mode Test tape AC-514 to TYPE II and AC-225 to TYPE I Measurement terminal: Both of the eraser head terminals	<ol> <li>While recording and playback mechanism, load the test tapes (AC-514 to TYPE II and AC-225 to TYPE I ), and set the mechanism to the recording and pausing conditions in advance.</li> <li>After setting to the recording conditions, connect 1W in series to the eraser head on the recording and playback mechanism side, and measure the eraser current from both of the eraser terminals.</li> </ol>	TYPE II : 120 mA TYPE I : 75 mA	

### ■ Extension code connecting method

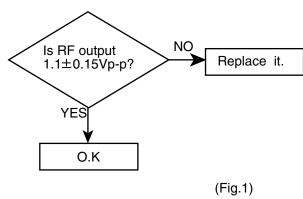


## Flow of functional operation until TOC read (CD)



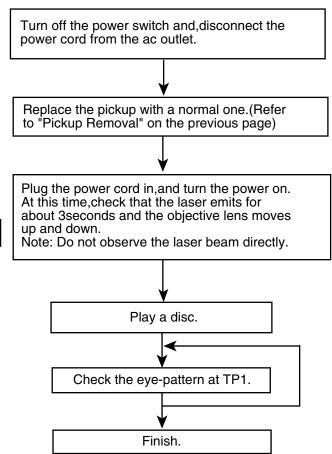
## Maintenance of laser pickup

- Cleaning the pick up lens
   Befor you replace the pick up, please try to
   clean the lens with a alcohol soaked cotton
   swab.
- (2) Life of the laser diode (Fig.1)
  When the life of the laser diode has expired, the following symptoms wil appear.
  - (1) The level of RF output (EFM output:amplitude of eye pattern) will below.



(3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed
circuit board which is attached to the pickup
is used to adjust the laser power. Since this
adjustment should be performed to match the
characteristics of the whole optical block,
do not touch the semi-fixed resistor.
If the laser power is lower than the specified
value, the laser diode is almost worn out, and
the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while
the pickup is functioning normally, the laser
pickup may be damaged due to excessive current.

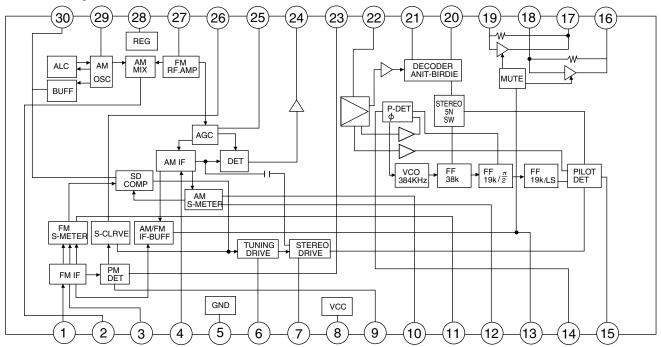
## Replacement of laser pickup



## **Description of major ICs**

### ■ LA1838 (IC1): FM AM IF amp & Detector, FM MPX decoder

#### 1. Block diagram

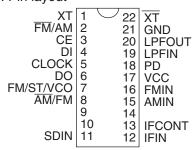


#### 2. Pin Function

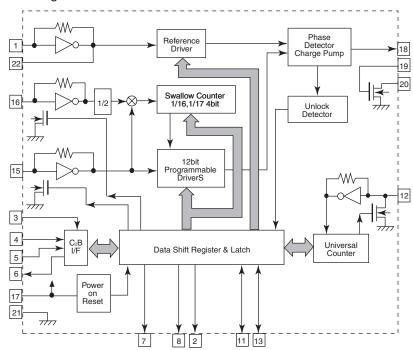
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	FM IN	ı	This is an input terminal of FM IF signal.	16	L OUT	0	Left channel signal output.
2	AM MIX	0	This is an out put terminal for AM mixer.	17	R OUT	0	Right channel signal output.
3	FM IF	I	Bypass of FM IF	18	L IN	I	Input terminal of the Left channel post AMP.
4	AM IF	ı	Input of AM IF signal.	19	R IN	I	Input terminal of the Right channel post AMP.
5	GND	-	This is the device ground terminal.	20	RO	0	Mpx Right channel signal output.
6	TUNED	0	When the set is tunning,this terminal becomes "L".	21	LO	0	Mpx Left channel signal output.
7	STEREO	0	Stereo indicator output. Stereo "L", Mono: "H"	22	MPX IN	I	Mpx input terminal
8	VCC	_	This is the power supply terminal.	23	FM OUT	0	FM detection output.
9	FM DET	-	FM detect transformer.	24	AM DET	0	AM detection output.
10	AM SD	_	This is a terminal of AM ceramic filter.	25	AM AGC	I	This is an AGC voltage input terminal for AM
11	FM VSM	0	Adjust FM SD sensitivity.	26	AFC	-	This is an output terminal of voltage for FM-AFC.
12	AM VSM	0	Adjust AM SD sensitivity.	27	AM RF	ı	AM RF signal input.
13	MUTE	I/O	When the signal of IF REQ of IC121( LC72131) appear, the signal of FM / AM IF output. //Muting control input.	28	REG	0	Register value between pin 26 and pin28 besides the frequency width of the input signal.
14	FM/AM	I	Change over the FM / AM input. "H" :FM, "L" : AM	29	AM OSC	-	This is a terminal of AM local oscillation circuit.
15	MONO/ST	0	Stereo : "H", Mono: "L"	30	OSC BUFFER	0	AM Local oscillation signal output.

#### ■ LC72136N (IC2) : PLL frequency synthesizer

#### 1. Pin layout



#### 2. Block diagram

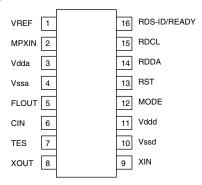


#### 3. Pin function

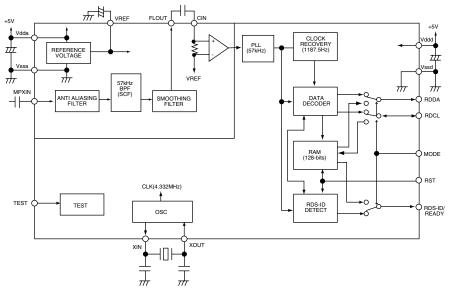
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	ı	X'tal oscillator connect (75kHz)	12	IFIN	ı	IF counter signal input
2	FM/AM	0	LOW:FM mode	13	IFCONT	0	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14		-	Not use
4	DI	I	Input for receive the serial data from controller	15	AMIN	I	AM Local OSC signal output
5	CLOCK	ı	Sync signal input use	16	FMIN	I	FM Local OSC signal input
6	DO	0	Data output for Controller	17	VCC	-	Power suplly(VDD=4.5-5.5V)
			Output port				When power ON:Reset circuit move
7	FM/ST/VCO	0	"Low": MW mode	18	PD	0	PLL charge pump output(H: Local OSC frequency Height than Reference frequency.  L: Low Agreement: Height impedance)
8	ĀM/FM	0	Open state after the power on reset	19	LPFIN	I	Input for active lowpassfilter of PLL
9	LW	I/O	Input/output port	20	LPFOUT	0	Output for active lowpassfilter of PLL
10	MW	I/O	Input/output port	21	GND	-	Connected to GND
11	SDIN	I/O	Data input/output	22	XT	I	X'tal oscillator(75KHz)

### ■ LA72723 (IC3) : RDS demodulation

#### 1. Pin layout



#### 2. Block diagram

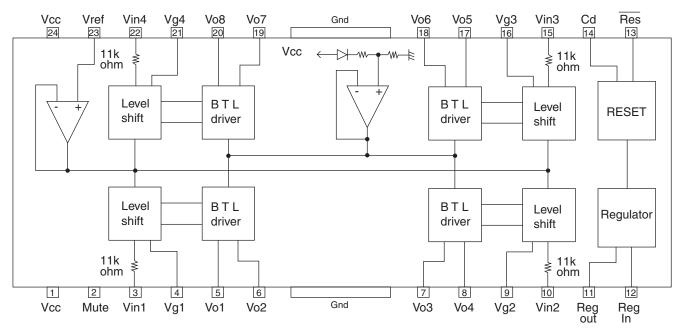


#### 3. Pin functions

Pin No.	Symbol	I/O	Function
1	VREF	0	Reference voltage output (Vdda/2)
2	MPXIN	I	Baseband (multiplexed) signal input
3	Vdda	_	Analog power supply (+5V)
4	Vssa	_	Analog ground
5	FLOUT	0	Subcarrier input (filter output)
6	CIN	I	Subcarrier input (comparator input)
7	TEST	I	Test input
8	XOUT	0	Crystal oscillator output (4.332MHz)
9	XIN	I	Crystal oscillator input (exeternal reference input)
10	Vssd	-	Digtal ground
11	Vddd		Digtal power supply
12	MODE	I	Read mode setting (0:master,1:slave)
13	RST	I	RDS-ID / RAM reset (positive polarity)
14	RDDA	0	RDS data output
15	RDCL	I/O	RDS clock output (master mode) / RDS clock input (slave mode)
16	RDS-ID READY	0	RDS-ID / READY output (negative polarity)

### ■ LA6541-X (IC801) : Servo driver

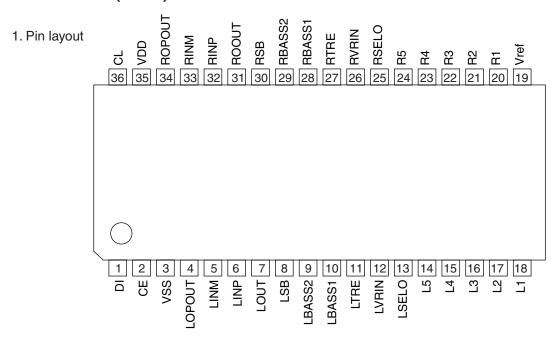
#### 1. Pin Layout & block diagram

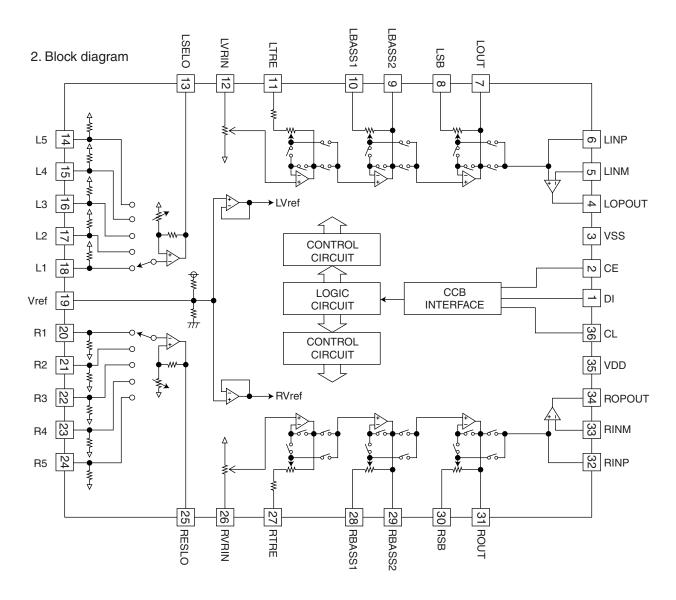


#### 2. Pin function

۷.۱	2. Pin function				
Pin No.	Symbol	Function			
1	Vcc	Power supply (Shorted to pin 24)			
2	Mute	All BTL amplifier outputs ON / OFF			
3	Vin1	BTL AMP 1 input pin			
4	Vg1	BTL AMP 1 input pin (For gain adjustment)			
5	Vo1	BTL AMP 1 input pin (Non inverting side)			
6	Vo2	BTL AMP 1 input pin (Inverting side)			
7	Vo3	BTL AMP 2 input pin (Inverting side)			
8	Vo4	BTL AMP 2 input pin (Non inverting side)			
9	Vg2	BTL AMP 2 input pin (For gain adjustment)			
10	Vin2	BTL AMP 2 input pin			
11	Reg Out	External transistor collector (PNP) connection. 5V power supply output			
12	Reg In	External transistor (PNP) base connection			
13	Res	Reset output			
14	Cd	Reset output delay time setting (Capacitor connected externally)			
15	Vin3	BTL AMP 3 input pin			
16	Vg3	BTL AMP 3 input pin (For gain adjustment)			
17	Vo5	BTL AMP 3 output pin (Non inverting side)			
18	Vo6	BTL AMP 3 output pin (Inverting side)			
19	Vo7	BTL AMP 4 output pin (Inverting side)			
20	Vo8	BTL AMP 4 output pin (Non inverting side)			
21	Vg4	BTL AMP 4 output pin (For gain adjustment)			
22	Vin4	BTL AMP 4 output pin			
23	Vref	Level shift circuit's reference voltage application			
24	Vcc	Power supply (Shorted to pin 1)			

#### ■ LC75345M-X (IC901): E.volume



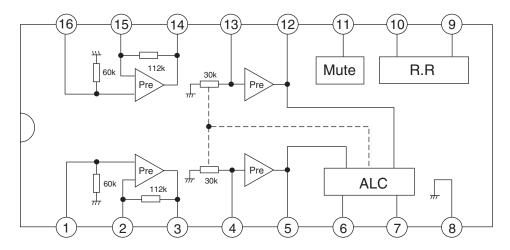


#### 3. Pin function

Pin No.	Symbol	Function
1	DI	Serial data and clock input pin for control.
2	CE	Chip enable pin.
3	VSS	Ground pin.
4	LOPOUT	Output pin of general-purpose operation amplifier.
5	LINM	Non-inverted input pin of general-purpuse operation amplifier.
6	LINP	Non-inverted input pin of general-purpuse operation amplifier.
7	LOUT	ATT + equalizer output pin.
8	LSB	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
9	LBASS2	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
10	LBASS1	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
11	LTRE	Capacitor and resistor connection pin comprising treble band filter.
12	LVRIN	Volume input pin.
13	LSELO	Input selector output pin.
14	L5	Input signal pin.
15	L4	Input signal pin.
16	L3	Input signal pin.
17	L2	Input signal pin.
18	L1	Input signal pin.
19	Vref	0.5 x VDD voltage generation block for analog ground.
20	R1	Input signal pin.
21	R2	Input signal pin.
22	R3	Input signal pin.
23	R4	Input signal pin.
24	R5	Input signal pin.
25	RSELO	Input selector output pin.
26	RVRIN	Volume input pin.
27	RTRE	Capacitor connection pin comprising treble band filter.
28	RBASS1	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
29	RBASS2	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
30	RSB	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
31	ROUT	ATT + equalizer output pin.
32	RINP	Non inverted input pin of general-purpose operation amplifier.
33	RINM	Non inverted input pin of general purpose operation amplifier.
34	ROPOUT	Output pin of general-purpose operation amplifier.
35	VDD	Supply pin.
36	CL	Serial data and clock input pin for control.

### ■ AN7317 (IC32) : R/P amp.

#### 1. Pin layout & block diagram

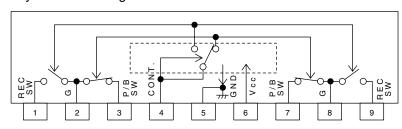


#### 2. Pin functions

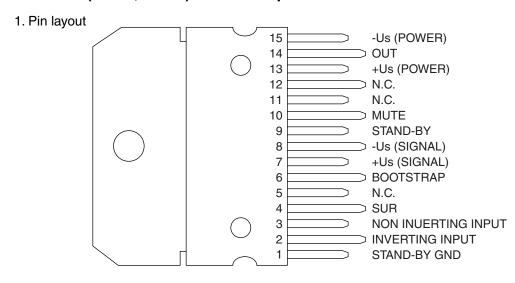
Pin No.	Function
1	Channel 1 playback amplifier input
2	Channel 1 playback amplifier negative feedback
3	Channel 1 playback amplifier output
4	Channel 1 record amplifier input
5	Channel 1 record amplifier output
6	ALC low-cut
7	ALC time
8	Ground
9	Vcc
10	Ripple filter
11	Record-Amplifier mute
12	Channel 2 record amplifier output
13	Channel 2 record amplifier input
14	Channel 2 playback amplifier output
15	Channel 2 playback amplifier negative feedback
16	Channel 2 playback amplifier input

### ■ BA3126N (IC31) : R/P switch

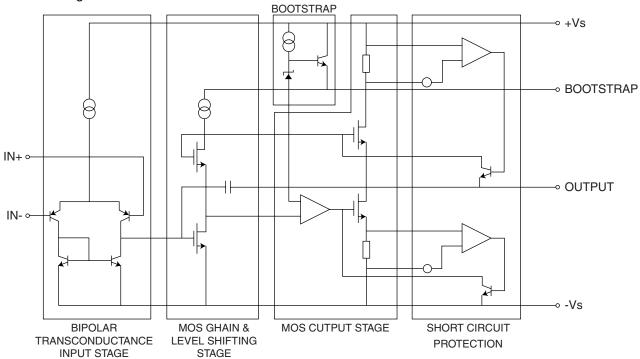
#### 1. Pin layout & block diagram



# ■ TDA7294 (IC940, IC941) : Audio amp.

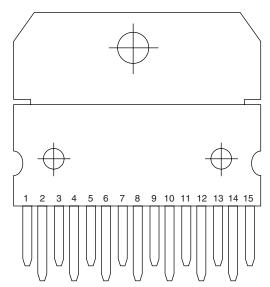


### 2. Block diagram

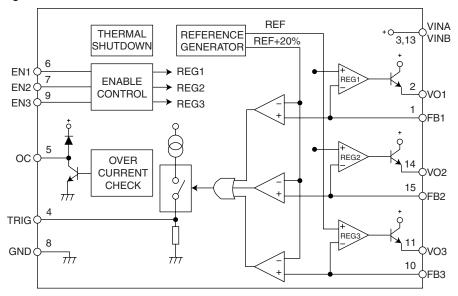


# ■ L4909 (IC942) : Regulator

### 1. Pin layout



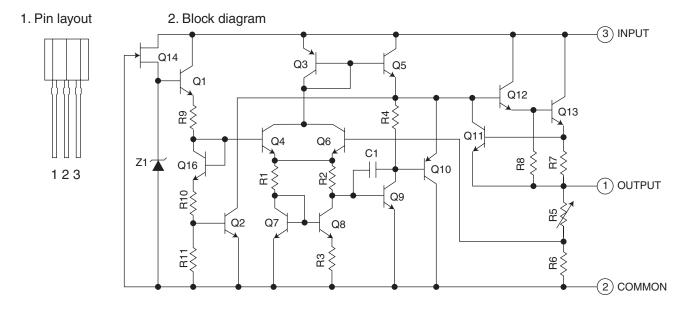
### 2. Block diagram



### 3. Pin functions

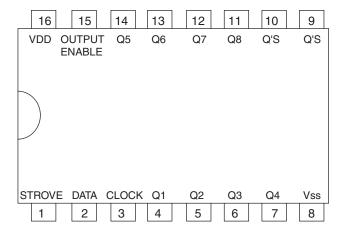
Pin No.	Symbol	Function
1	FB1	REG1 feedback voltage input
2	VO1	REG1 output voltage
3	VINA	Input DC supply voltage
4	TRIG	Trigger for external SCR (crowbar protection)
5	OC	Over current warning output
6	EN1	REG1 enable input
7	EN2	REG2 enable input
8	GND	Analog ground
9	EN3	REG3 enable input
10	FB3	REG3 feedback voltage input
11	VO3	REG3 output voltage
12	N.C.	Not connected
13	VINB	Input DC supply voltage
14	VO2	REG2 output voltage
15	FB2	REG2 feedback voltage input

# ■ KIA78S06P-T (IC932) : Regulator

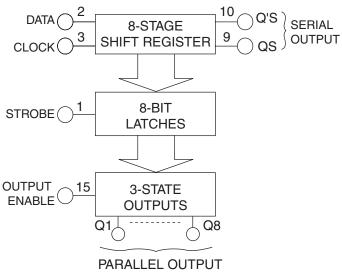


# ■ BU4094BCF-X (IC33) : Shift/store registor



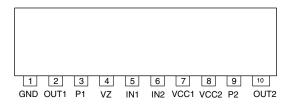


#### 2. Block diagram



### ■ LB1641 (IC802) : DC motor driver

### 1. Pin layout



### 2. Pin function

Inp	ut	Out	put	Mode	
IN1	IN2	OUT1	OUT2		
0	0	0	0	Brake	
1	0	1	0	CLOCKWISE	
0	1	0	1	COUNTER-CLOCKWISE	
1	1	0	0	Brake	

# ■ MN662748RPMFA (IC651) : DSP

# 1. Terminal layout

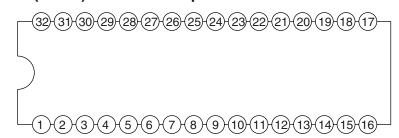


### 2. Pin function

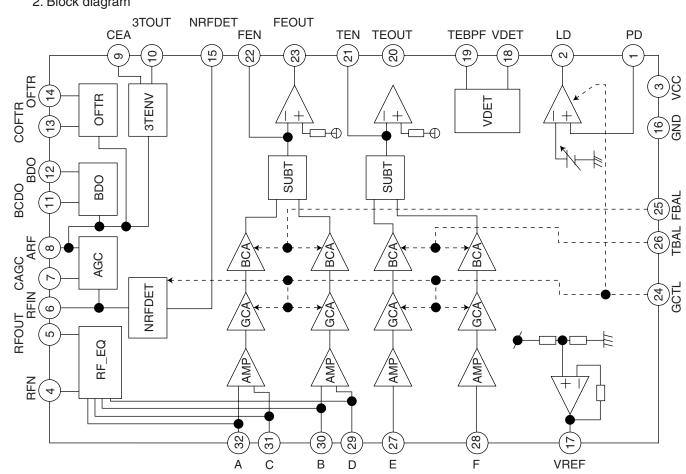
Pin No	Symbol	I/O	Function	Pin No	Symbol	I/O	Function
1	BCLK	-	Not use	41	PLLF2	-	Not use
2	LRCK	-	Not use	42	TOFS	-	Not use
3	SRDATA	-	Not use	43	WVEL	-	Not use
4	DVDDI	-	Power supply for digital circuit	44	ARF	Τ	RF signal input
5	DVSSI	-	GND for digital circuit	45	IREF	Τ	Reference current input
6	TX	-	Not use	46	DRF	Τ	Bias pin for DSL
7	MCLK	Ι	Micro computer command	47	DSLF	I/O	Loop filter pin for DSL
			clock signal input	48	PLLF	I/O	Loop filter pin for PLL
8	MDATA	Ι	Micro computer command	49	VCOF	I/O	Loop filter pin for VCO
			data input	50	AVDD2	-	Power supply for analog
9	MLD	Ι	Micro computer command	1			circuit
			load signal input (L: Load)	51	AVSS2	-	GND for analog circuit
10	SENSE	-	Not use, connect to TP716	52	EFM	-	Not use, connect to TP724
11	FLOCK	-	Not use, connect to TP717	53	PCK	0	Clock output for PLL
12	TLOCK	-	Not use, connect to TP718	54	VCOF2	I/O	Loop filter pin for Digital
13	BLKCK	0	Sub code block clock	1			servo VCO
			signal output	55	SUBC	-	Not use
14	SQCK	I	External clock input for sub	56	SBCK	-	Not use
			code Q register input	57	VSS	-	GND for crystal oscillation
15	SUBQ	0	Sub code Q data output				circuit
16	DMUTE	-	Not use, connect to TP719	58	X1	Τ	Input for crystal oscillation
17	STAT	0	Status signal input				circuit (f=16.9344MHz)
18	RST	Ι	Reset signal input (L: Reset)	59	X2	0	Output for crystal oscillation
19	SMCK	-	Not use				circuit (f=16.9344MHz)
20	PMCK	-	Not use, connect to TP720	60	VDD	-	Power supply for crystal
21	TRV	0	Traverse enforced output				oscillation circuit
22	TVD	0	Traverse drive output	61			Not use
23	PC	-	Not used	62	CLDCK	0	Sub code frame clock
24	ECM	0	Spindle motor drive signal				signal output
			(Enforced mode output)	_	FCLK		Not used
25	ECS	0	Spindle motor drive signal	64	IPFLAG	0	Interpolation flag signal
			(Servo error signal output)				output, Connect to TP721
26	KICK		Kick pulse output	65	FLAG	0	Flag signal output,
27	TRD		Tracking drive output				Connect to TP722
28	FOD		Focus drive output	_	CLVS	-	Not use
29	VREF		Reference voltage	67			Not use
		L_	for D/A output block	68	DEMPH	0	De-emphasis detect signal
30	FBAL	0	Focus balance adjust	L			output, Connect to TP723
L.			signal output	69		-	Not use
31	TBAL	0	Tracking balance adjust	70	IOSEL		Mode select pin, Connect
		١.	signal output			ļ.,	to DVDD1 (H fix)
32	FE		,	71	/TEST	1	Test pin, Connect to
		١.	(Analog input)		A) (DD 4		DVDD1 (H fix)
33	TE		Tracking error signal input	72	AVDD1	-	Power supply for analog
-	DEEX. /	١.	(Analog input)		OLIT!	_	circuit
34	RFENV	ı	RF envelope signal input	73		_	L-channel audio output
0.5	VDET	١.	(Analog input)		AVSS1	-	GND for analog circuit
35	VDET	I	Vibration detect signal	75			R-channel audio output RF signal polarity setting pin
	OFT	٠.	input (H:Detect)	76	RSEL		
36	OFT	ı	Off track signal input	77	0051	<b>.</b>	Connect to DVDD1 (H fix)
27	TDCDC	-	(H:Off track)	77	CSEL	ı	Oscillation frequency setting pin, Connect to GND (L fix)
37	TRCRS		Track cross signal input	70	PSEL	<del>                                     </del>	IOSEL=H, Test pin,
38	/RFDET		RF detect signal input	78	FOEL		Connect to GND (L fix)
39	BDO		(L:Detect) Drop out signal input	79	MSEL	<del>                                     </del>	IOSEL=H, SMCK output,
39	טטט		(H:Drop out)	1'9	IVISEL		Frequency select pin
40	LDON	0	Laser on signal output	80	SSEL		IOSEL=H, SMCK output,
40	LDON		(H:ON)	00	JOLL		SUBQ output mode select pin
		<u> </u>	I(11.014)				1000 GOLDER PILI

# ■ AN22000A-W (IC601) : RF head amp.

1. Pin layout



2. Block diagram

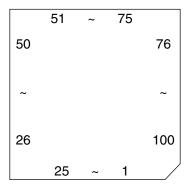


### 3. Pin function

Pin No.	Function	Pin No.	Function
1	APC amp input terminal.	17	VREF output terminal.
2	APC amp output terminal.	18	VDET output terminal.
3	Power supply.	19	VDET input terminal.
4	RF amp negative input terminal.	20	TE amp. output terminal.
5	RF amp output terminal.	21	TE amp. negative input terminal.
6	AGC input terminal.	22	FE amp. negative input terminal.
7	AGC loop filter capacitor connection terminal.	23	FE amp. output terminal.
8	AGC output terminal.	24	GCTL & APC terminal.
9	Capacitor connection terminal for HPF-amp.	25	FBAL control terminal.
10	3TENV output terminal.	26	TBAL control terminal.
11	Capacitor connection terminal for RF enberope detection.	27	Tracking signal input terminal 1.
12	BDO output terminal.	28	Tracking signal input terminal 2.
13	Capacitor connection terminal for RF enverope detection.	29	Focus signal input terminal 4.
14	OFTR output terminal.	30	Focus signal input terminal 3.
15	NRDET output terminal.	31	Focus signal input terminal 2.
16	Ground terminal.	32	Focus signal input terminal 1.

# ■ MN101C38CEK1 (IC931) : Micro controller

# 1. Pin layout

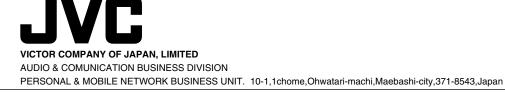


### 2. Pin Function

2. Pin	Function				
Pin No.	Symbol	I/O	Function	Pin No.	Syr
1~4	COM3~0	-	LCD Bias co mmon	46	DIM
5~7	VLC3~1	-	LCD Bias voltage	47	LED
8	VDD	-	5V		
9	OSC2	0	Main oscillation 12MHz	48	SL
10	OSC1	1	Main oscillation 12MHz	49	l N
11	VSS	-	Ground	50	SE
12	NC	Ι	No use. Fixed to VSS.	51	MD
13	NC	0	No use. Open	52	M
14	MMOD	ı	Fixed to ground	53	XF
15	VREF-	-	Ground	54	M
16	SAFETY0	ı	Irregular voltage detection 0	55	ST
17	SAFETY1	ı	Irregular voltage detection 1	56	RE
18	TAPE0	ı	Tape Switch 0	57	VC
19	TAPE1	Ι	Tape Switch 1	58	V
20, 21	KEY0, 1	ı	Unit KEY INPUT	59	PEF
22	DOOR_RST	ı	Rest/close switch detect port	60	F_
23	CDSAFETY	ı	CD safety voltage detect port	61	CL
24	VREF+	-	5V	62	OF
25	SDATA	I/O	Serial data (Tuner/ PLL IC)	63	P_0
26	NC	0	No use. OUTPUT LOW	64	В
27	SCK	0	Serial clock (Tuner/ PLL IC)		
28	NC	0	No use. OUTPUT LOW	65	BTLI
29	QRIN	ı	Q-code data input port		
30	SQCK	0	Q-code serial clock	66	N
31	F_CD	0	CD Function ("H"= CD)	67~88	SEG
32	/RST	I/O	RESET	89~100	SEG
33	MPX	ı	FM stereo detection ( 'L'= stereo)		
34	BCTL	0	During Back up set H, other case L.		
			This back up means plug out.		
35	VOLCE	0	volume chip enable		
36	NC	0	No use. OUTPUT LOW		
37	PROTR	ı	Protector detect. When detect		
			PROTR=L, set SPKMUTE to 'L'.		
38	REM	Ι	Remoto control input		
39	RDSCK	ı	RDS clock		
40	BLKCK	ı	Block clock input port		
41	FLAG	ı	Error Correction Count Input		
42	STAT	ı	CD status input port		
43	SMUTE	0	MUTE ON=L		
44	SPKMUTE	0	Speaker mute.When detect		
45	AHB	0	PROTR=L, set SPKMUTE to 'L'.  Active Hyper Bass On/Off AHB OFF=H, AHB1, 2=L		

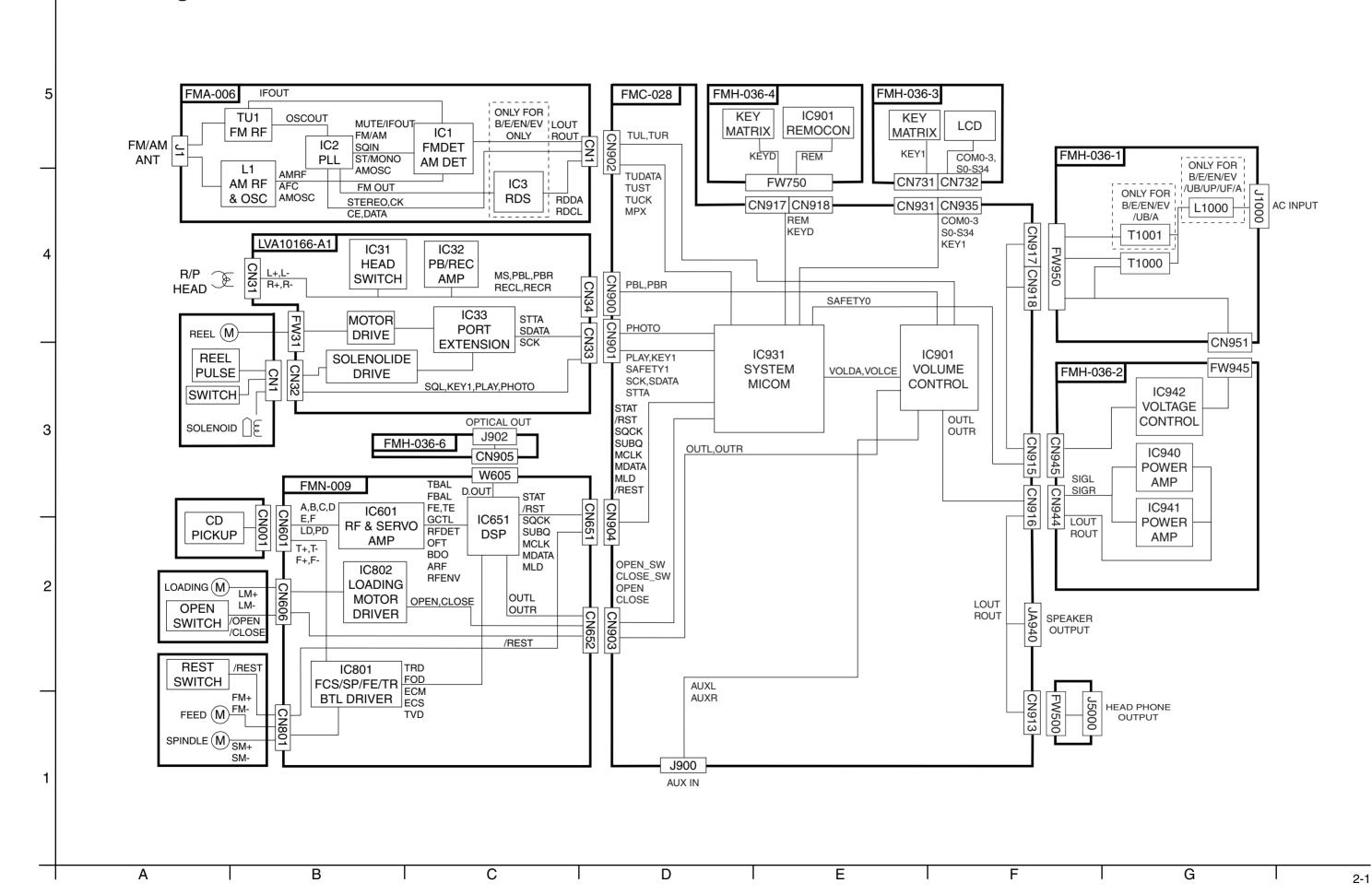
_				
	Pin No.	Symbol	I/O	Function
	46	DIMCTL	0	LCD DIM control. DIMMER ON =L
	47	LEDCTL	0	Power standby LED control
				STANDBY = L, POWER ON = H
	48	SURR	0	Surround IC control, H:=Surroud on
	49	NC	0	No use. Open
	50	SEG12	0	SEGMENT OUTPUT
	51	MDATA	0	CD data input port
	52	MCLK	0	CD data clock
	53	XRST	0	CD reset
	54	MLD	0	CD command ready signal
	55	STTA	0	Tape IC strobe
	56	REEL	ı	Reel pulse input
	57	VOL+	1	Volume plus
	58	VOL-	1	Volume minus
	59	PERIOD	0	Tuner pLL strobe
	60	F_TU	0	Tuner function ('H'=Tuner)
	61	CLOSE	0	Door close motor control output
	62	OPEN	0	Door open motor control output
	63	P_OUT	0	Power on/off ('H'=Power ON)
	64	BUP	ı	Back up power detect. When detect 'H',
				goto backup mode (STOP mode).
	65	BTLMUTE	0	BTL mute control port. MUTE ON =L
				During non CD play , MUTE ON.
	66	NC	0	No use. OUTPUT LOW
	67~88	SEG13~34	0	SEGMENT OUTPUT
	89~100	SEG0~11	0	SEGMENT OUTPUT

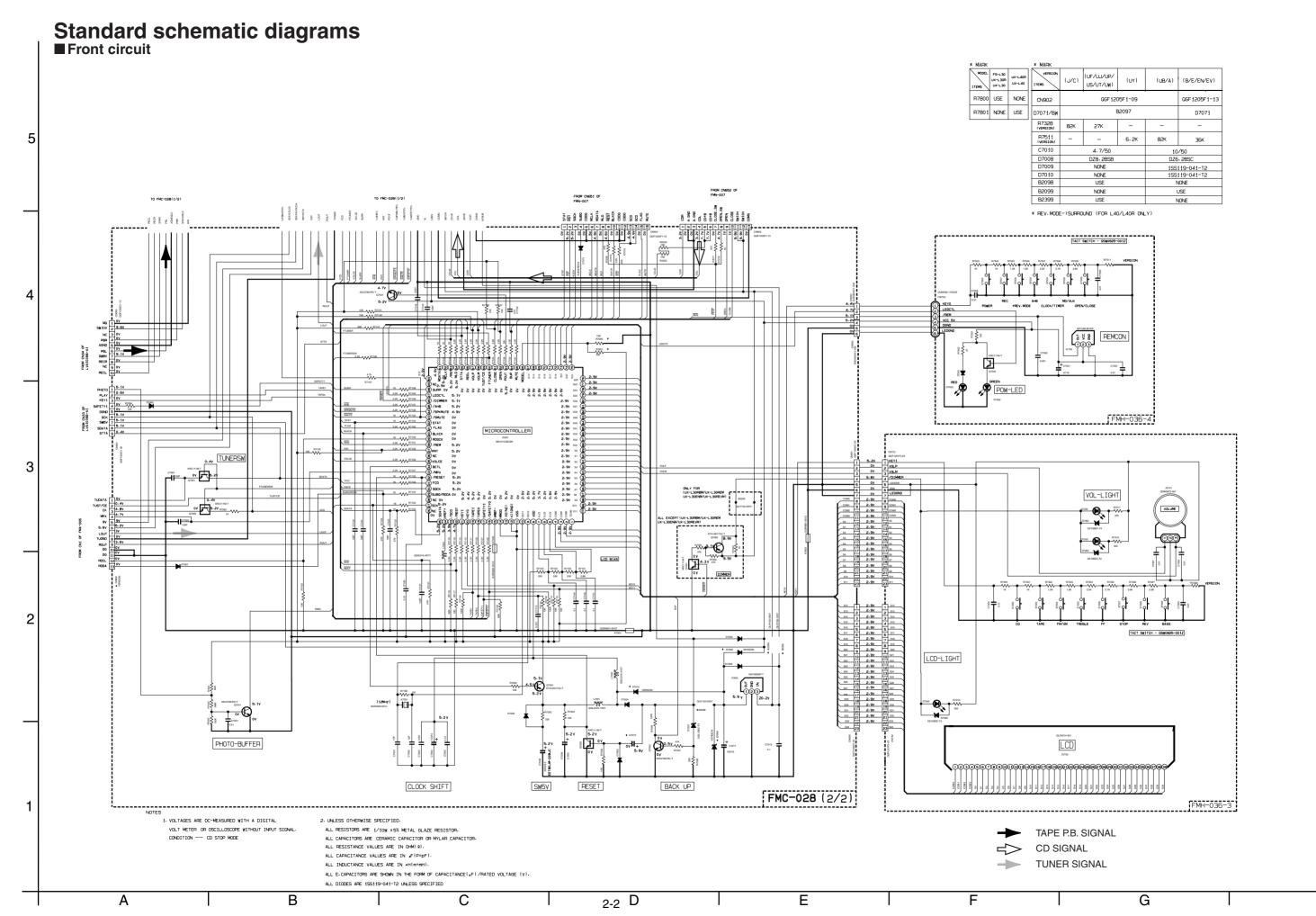
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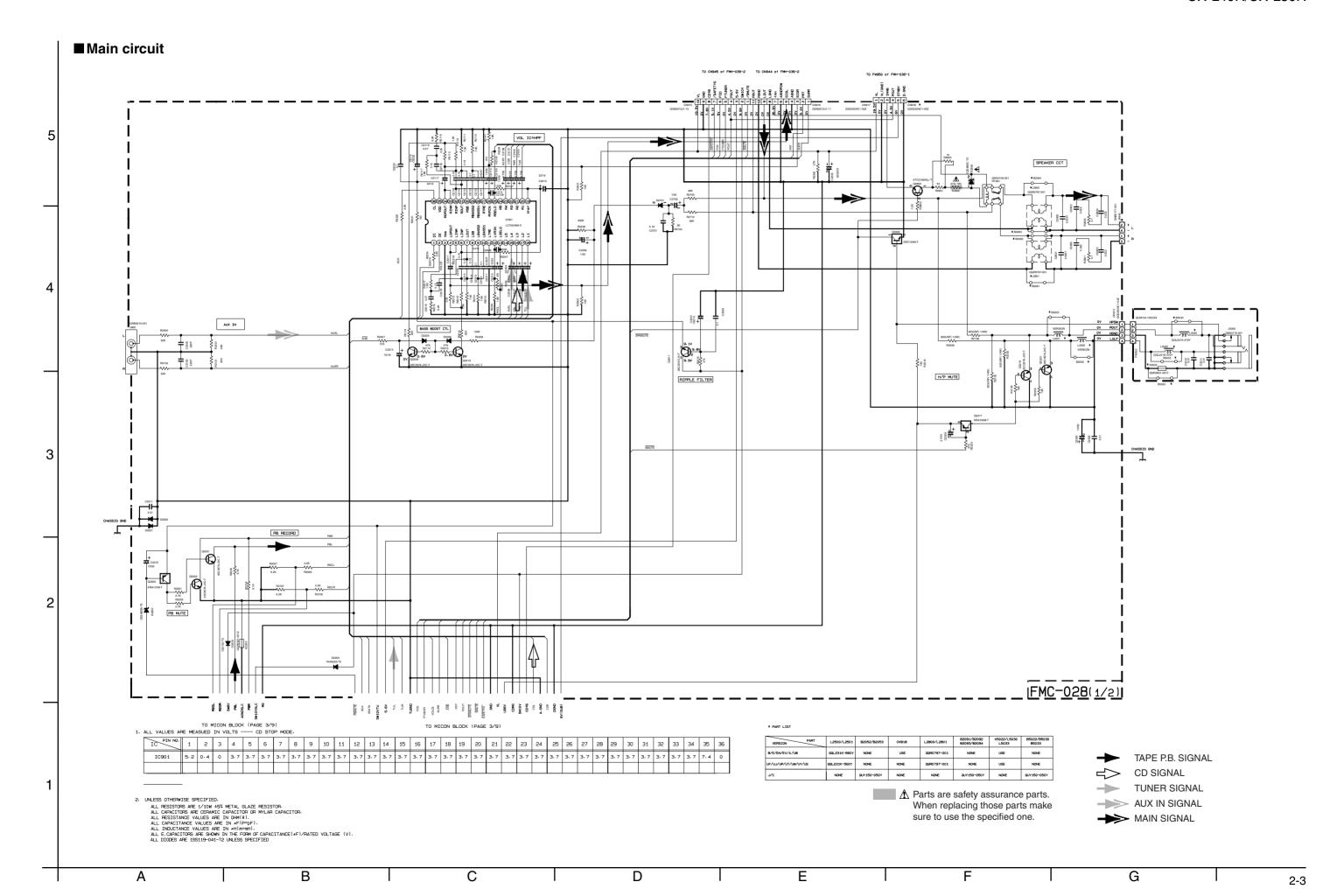


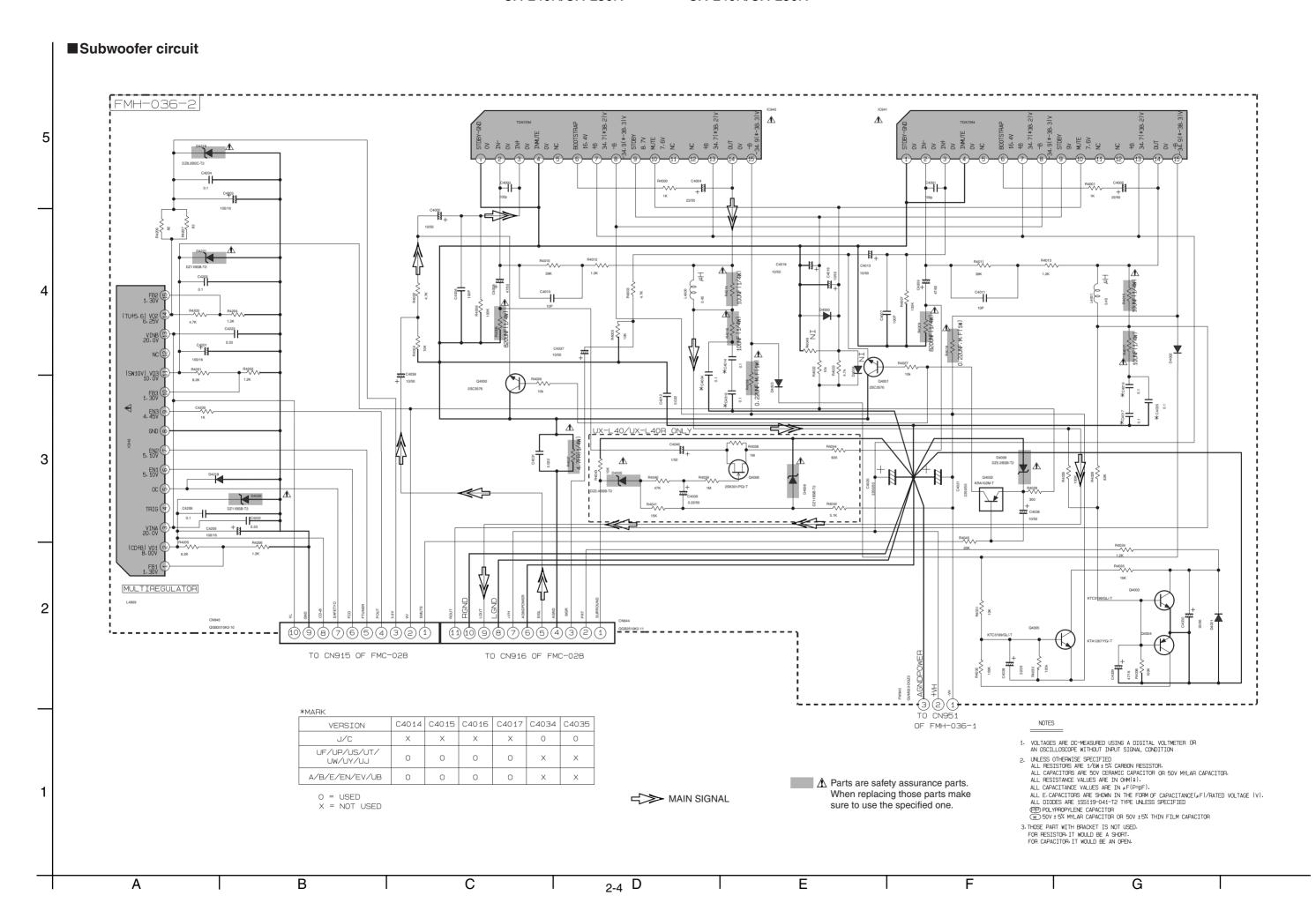
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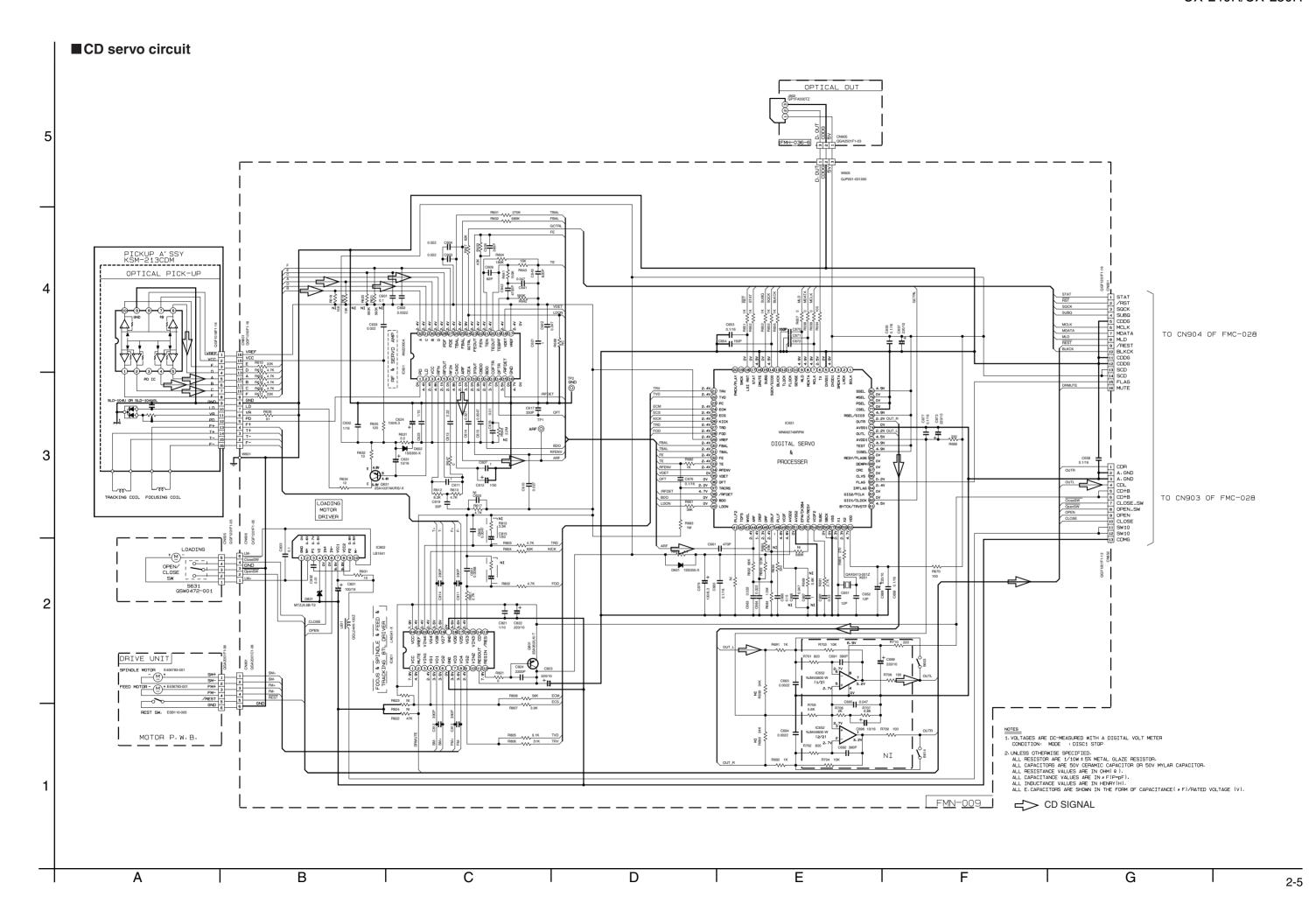
# **Block diagram**

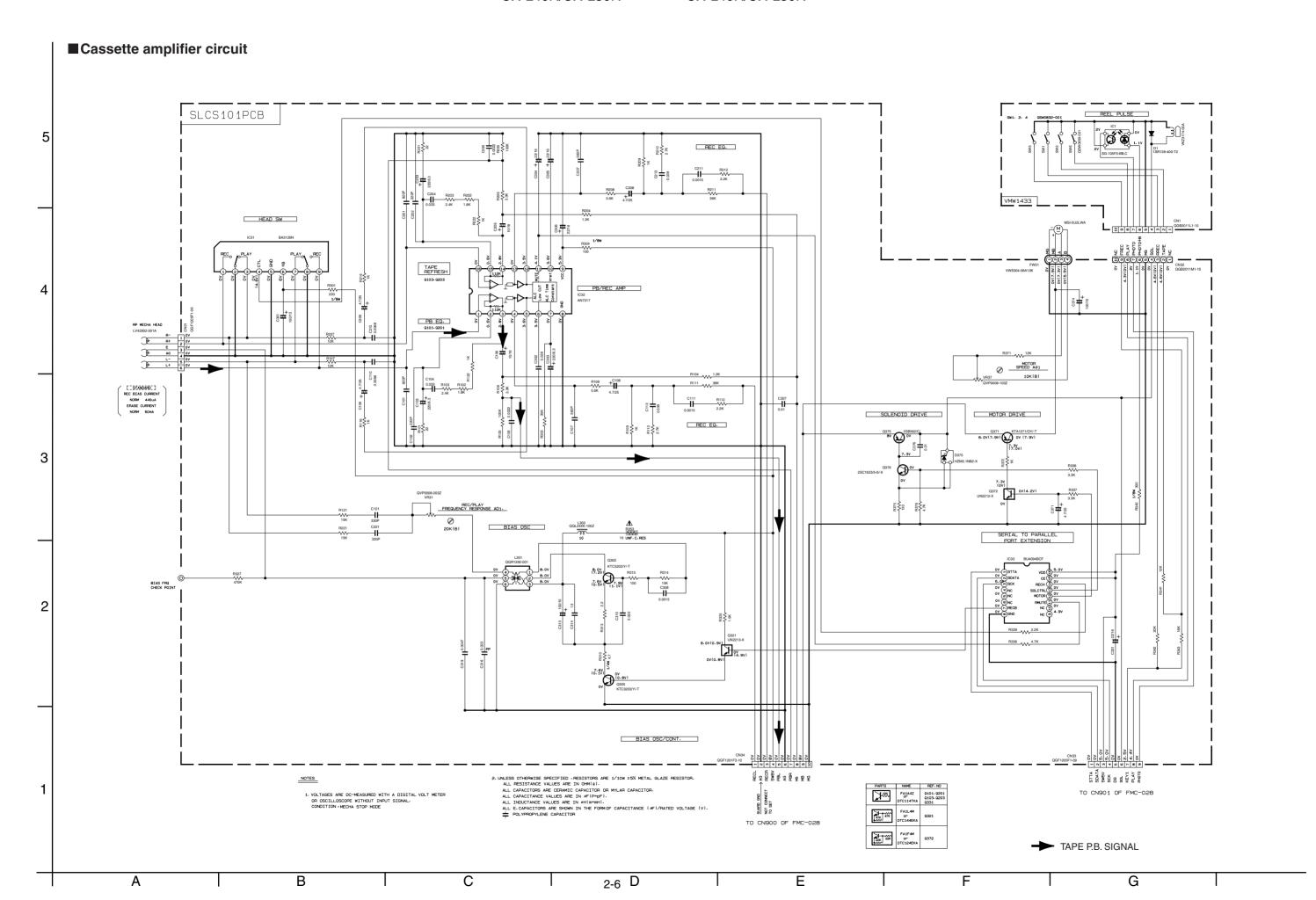


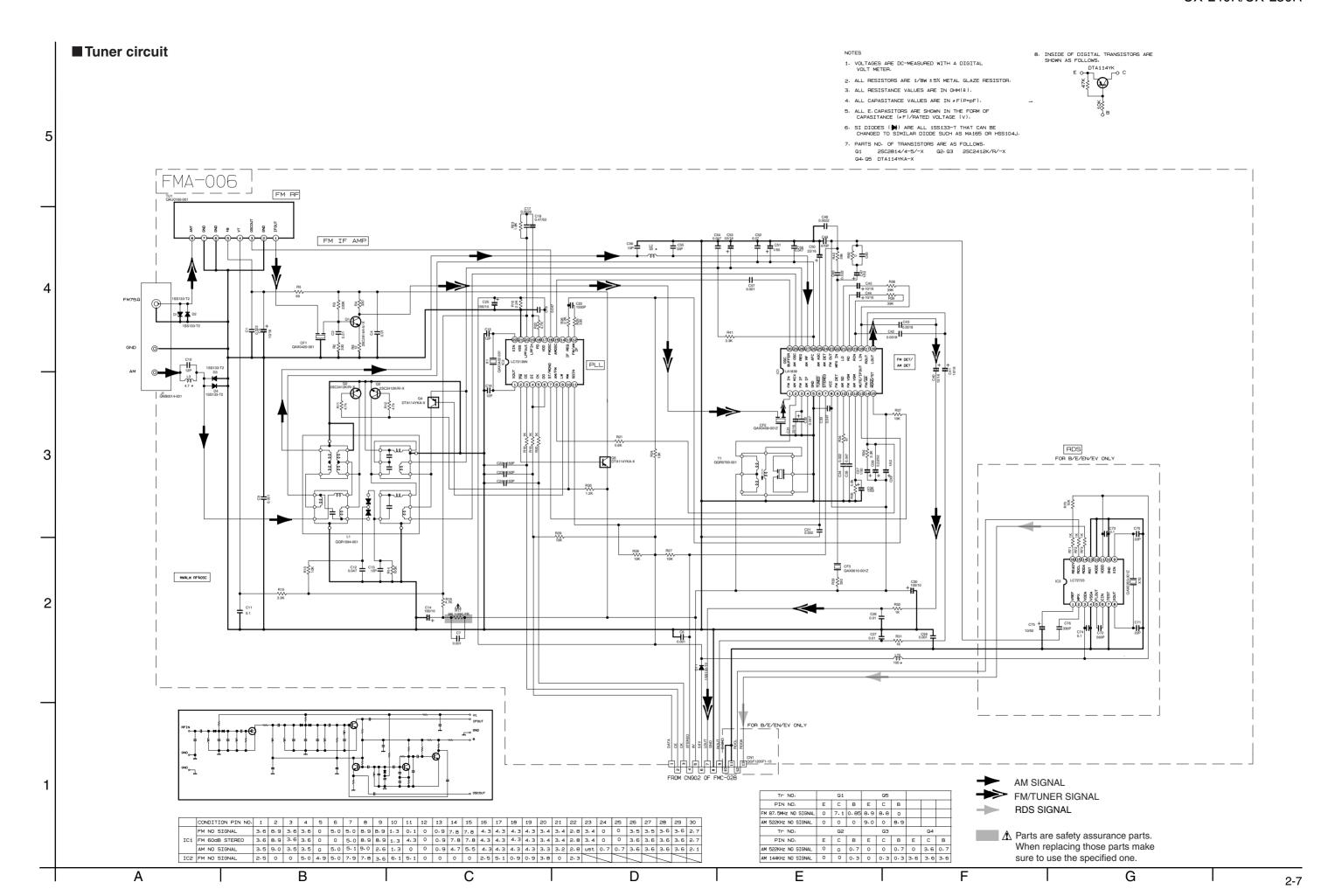












### **■** Power supply circuit

3

2

EXP	EXPLANATION OF OVERALL OF SCHEMATIC						
	MODEL : FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40						
SHEET	" I THOTHIS DESCRIPTION						
1/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	.PRIMARY WITH MAINS TRANSFORMER					
2/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	. AUDIO OUTPUT . EXTERNAL INPUT					
3/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	.LCD DISPLAY/SYSTEM CONTROL/USERS KEY CONTROL .SOURCE SELECTOR SWITCH					
4/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	.CD SERVO AND CD SYSTEM CONTROL					
5/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	.TAPE DECK MECHANISM CONTROL .TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS					
6/8	FS-L30/UX-L30/UX-L40	.TUNER RF/IF/FM MULTIPLEX (ONLY FOR J/C/UF/UJ/UP/US/UT/UW/UY)					
7/8	7/8 UX-L30R/UX-L40R/UX-L40 . TUNER RF/IF/FM MULTIPLEX (ONLY FOR UB/A/B/E/EN/EV)						
8/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	.POWER BOARD .MULTIREGULATOR					

\*NOTE : MARK( ) IS TO SHOW DEVIATION IN VERSIONS. DETAILS ARE EXPLAINED NEAR MARK.

#### VERSION CODES

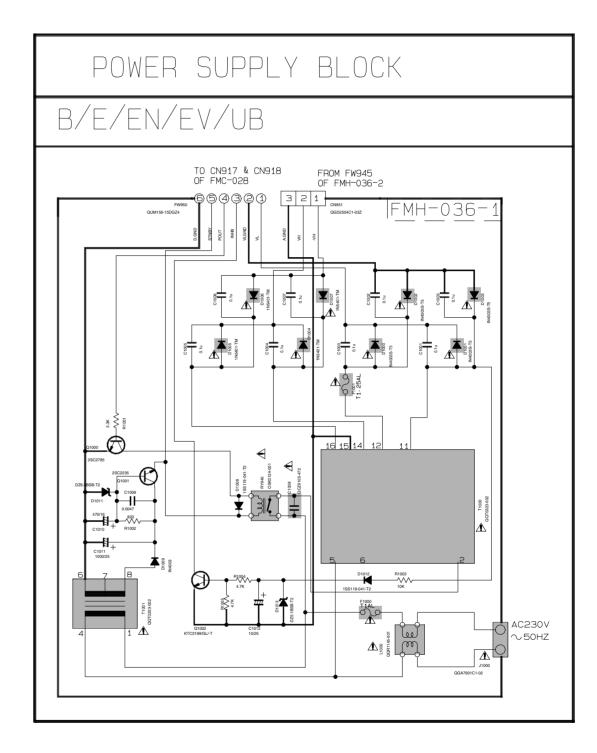
- J :USA C :CANADA A :AUSTRALIA

- B : U.K E : CONTINENTAL EUROPE EN : NORDIC COUNTRIES
- EV : EASTERN EUROPE & RUSSIA
- UB :HONG KONG
- UF : CHINA
- UJ :MILITARY UP :KOREA
- UT :TAIWAN
- UW :SOUTH AMERICA
- UY : ARGENTINA
- US :SINGAPORE AND UNIVERSAL EXCEPT ALL OF ABOVES

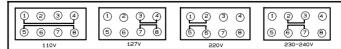
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↑ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

2-8 D

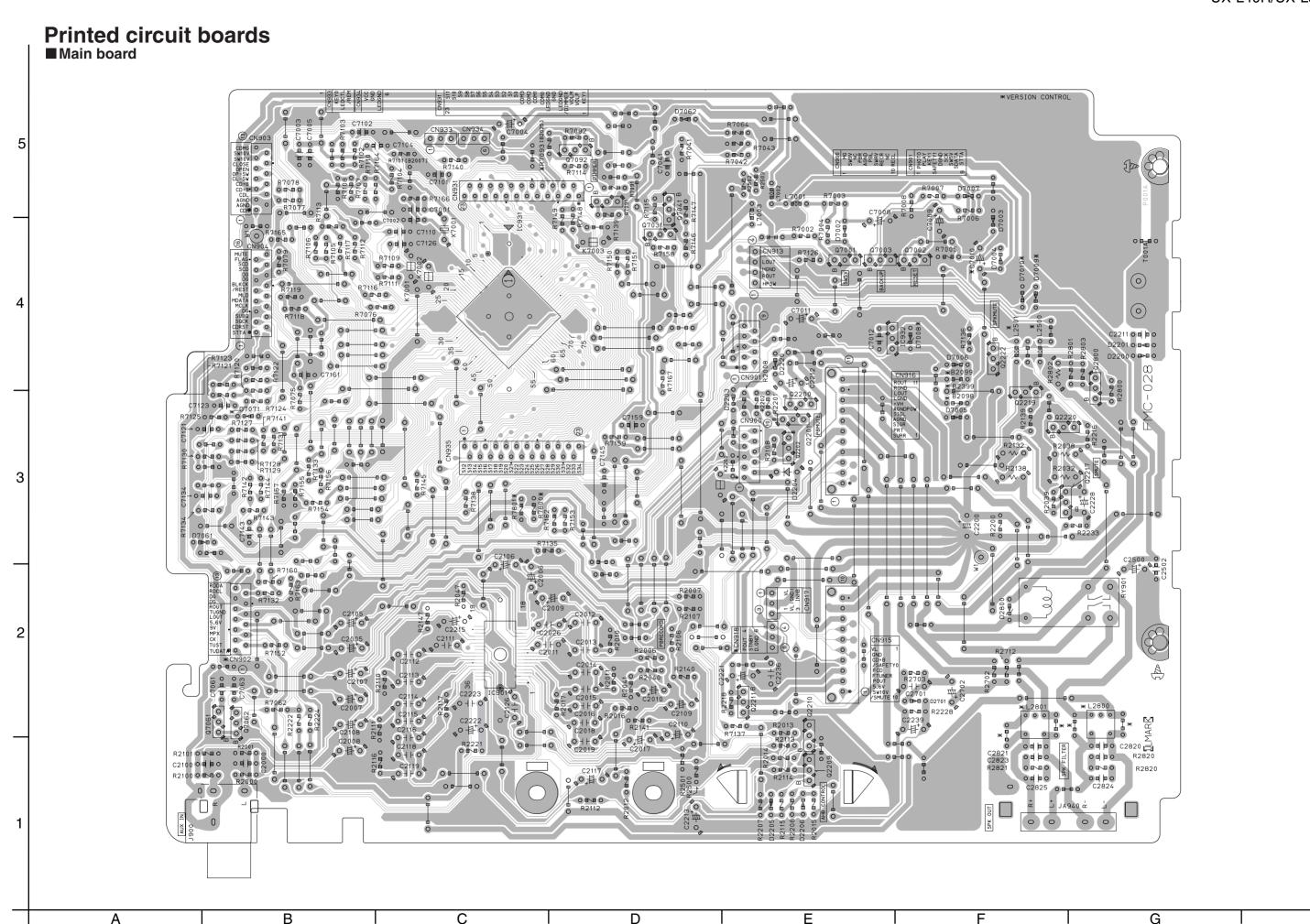


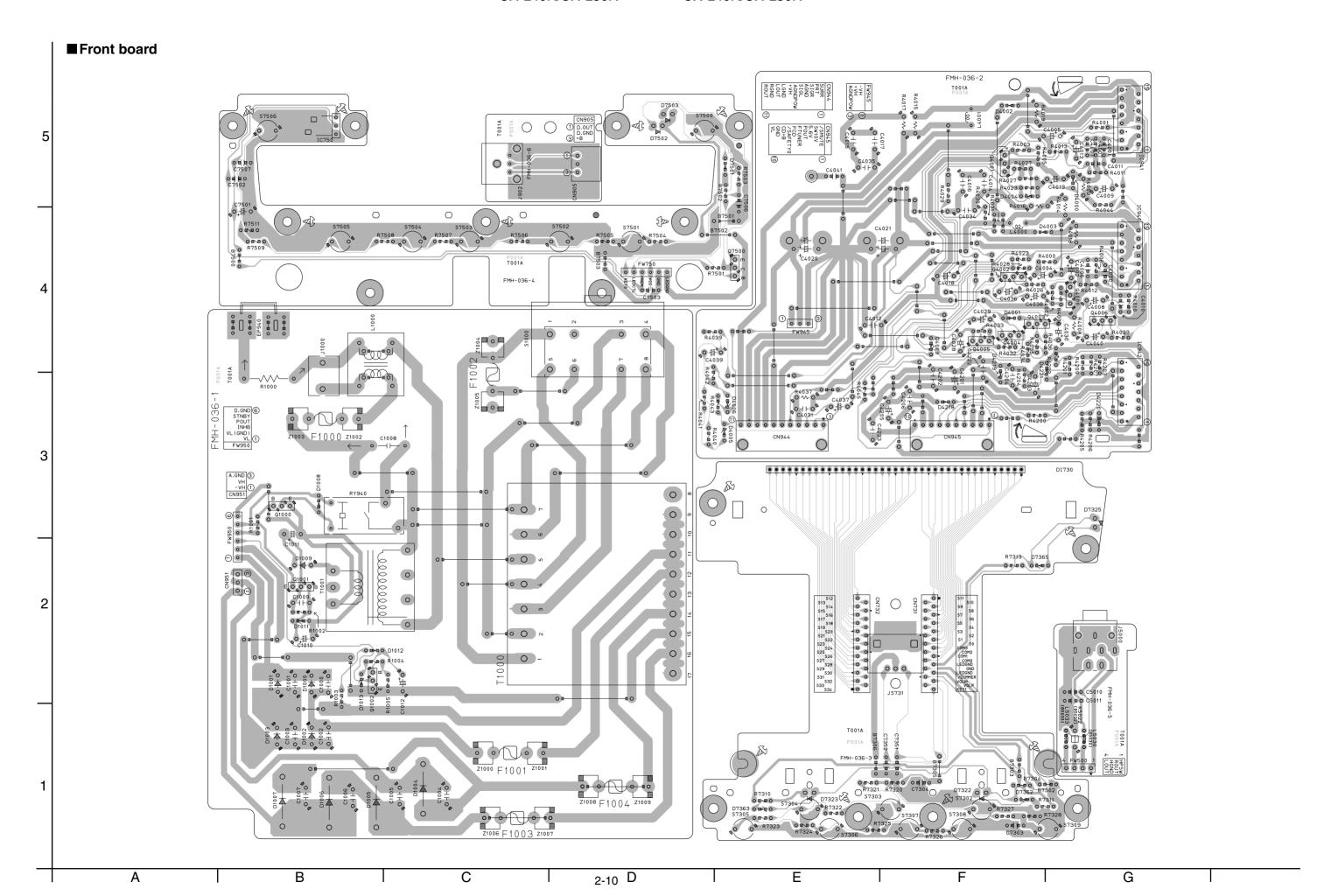
#### VOLTAGE SELECTOR LOCATION



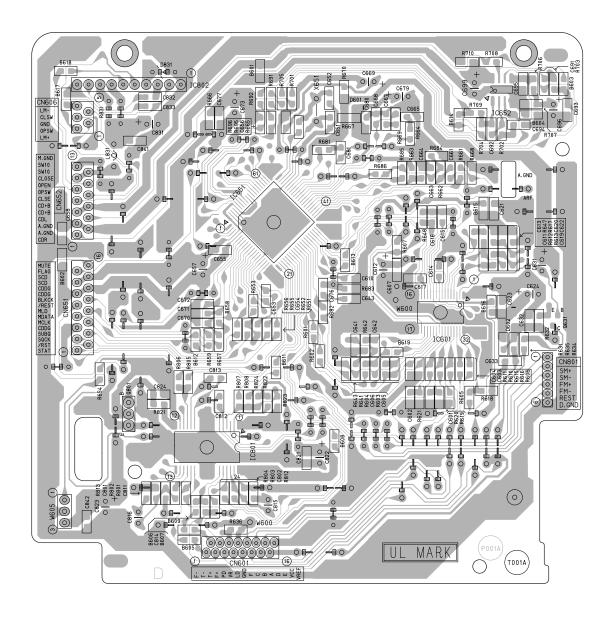
- 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE MITHOUT INPUT SIGNAL. INSIDE BRACKET VALUES ARE OTHER FUNCTIONS

- 2. UNLESS OTHERWISE SPECIFIED -RESISTORS ARE 1/5N 15X CARBON RESISTOR.
  ALL RESISTANCE VALUES ARE IN OM(1).
  ALL CAPACITORS OF CERRANC CAPACITOR OR MILAR CAPACITOR.
  ALL CAPACITANCE VALUES ARE IN +FIRMF!.
  ALL DOCTANCE VALUES ARE IN +HISMAN!
  ALL CAPACITANCE VALUES ARE IN +HISMAN!
  ALL CAPACITANCE VALUES ARE IN THE FORM OF CAPACITANCE (+FI/PATED VOLTAGE (V).



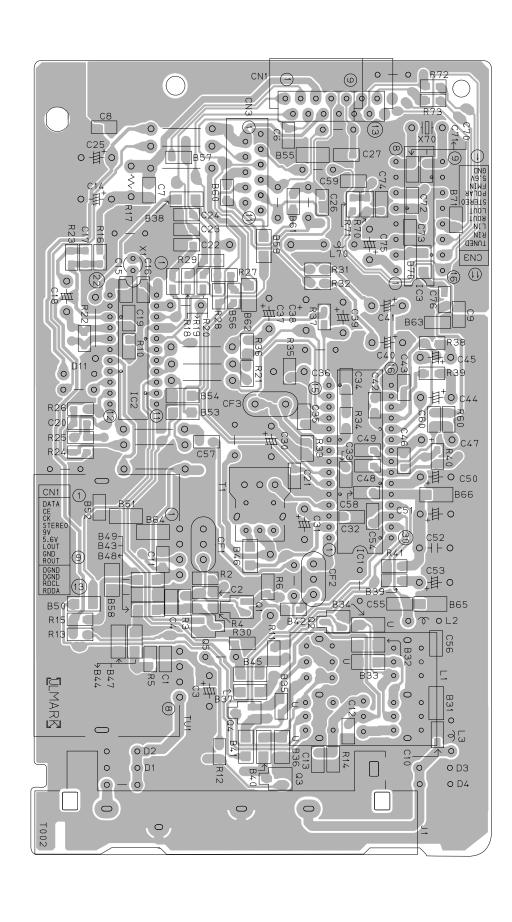


# ■CD servo board



A B C 2-11

### **■** Tuner board



2-12 | A | B | C

# ■ Head amplifier board

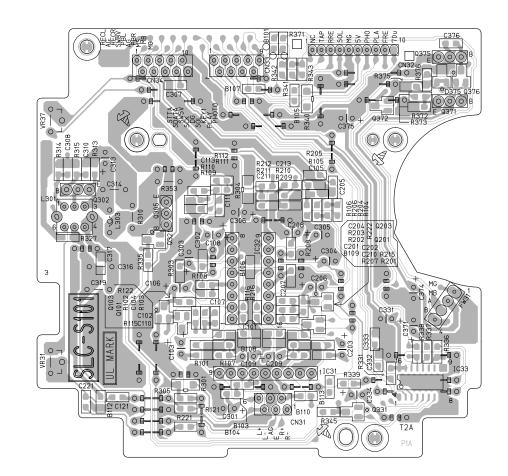
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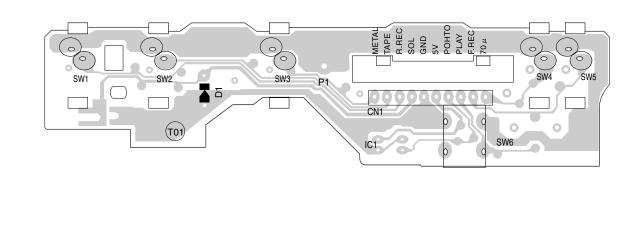
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2

1



### **■** Cassette switch board

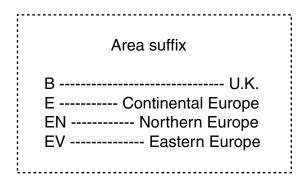


A B C 2-13

# PARTS LIST

[ UX-L40R ] [ UX-L30R ]

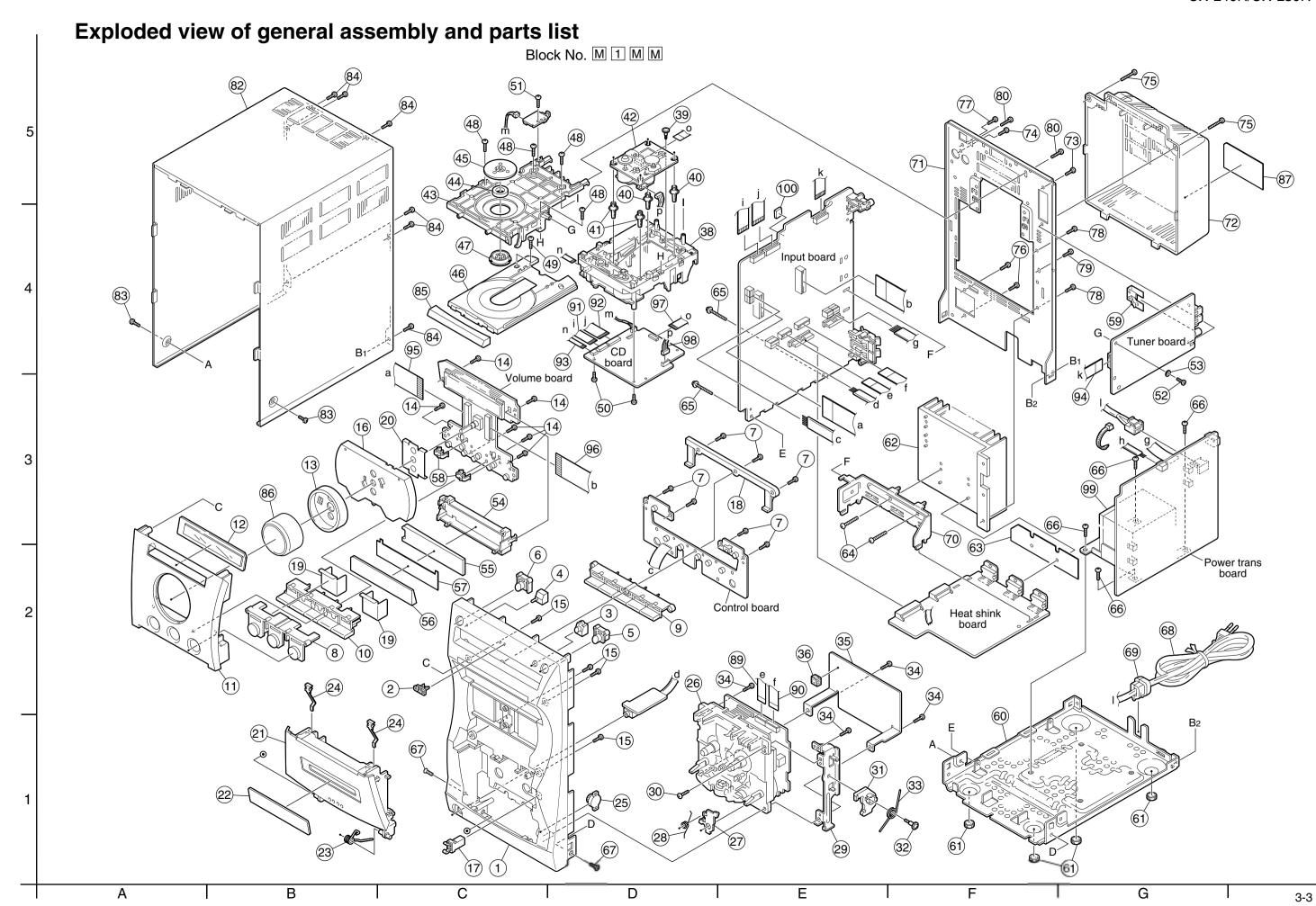
\* All printed circuit boards and its assemblies are not available as service parts.



# - Contents -

Exploded view of general assembly and parts list (Block No.M1)	3-	3
CD loading base assembly and parts list (Block No.MD)	3-	6
Cassette mechanism assembly and parts list (Block No.MP)	3-	8
Electrical parts list (Block No.01~06)	3-	10
Packing materials and accessories parts list (Block No.M3,M5) ······	3-2	20

# < MEMO >



### ■ Parts list (General assembly)

■ Parts list (General assembly) Block No. M1N								
$\Lambda$	Item	Parts number	Parts name	Q'ty	Description	Area		
	1	GV10100-003A	FRONT PANEL	1				
	2	GV40077-002A	JVC BADGE	1				
	3	GV40272-001A	REMOTE LENS	1				
	4	GV40284-001A	LED LENS	1				
	5	GV40274-002A	EJECT BUTTON	1				
	6	GV40273-002A	POWER BUTTON	1				
	7	QYSDSF2610Z	TAPPING SCREW	7	F.PANEL/PWB			
	8	GV30264-002A	FUNC BUTTON ASSY	1				
	9	GV30265-002A	CONTROL BTN(A)	1	UX-L40R			
		GV30265-001A	CONTROL BTN(A)	1	UX-L30R			
	10	GV30266-001A	CONTROL BTN(B)	1	UX-L30R			
		GV30266-002A	CONTROL BTN(B)	1	UX-L40R			
	11	GV20161-001A	FRONT PLATE	1	UX-L30R			
		GV20161-004A	FRONT PLATE	1	UX-L40R			
	12	GV30274-001A	FRONT LENS	1				
	13	GV30262-001A	VOLUME ORNAMENT	1				
	14	QYSDSF2610Z	TAPPING SCREW	6	F.PLATE/PWB			
	15	QYSDSF2610Z	TAPPING SCREW	4	F.PLATE/F.PANEL			
	16	GV30267-002A	ILLUMI.LENS	1				
	17	GV40220-001A	LATCH	1				
	18	GV30338-001A	BASE HOLDER	1				
	19	GV40337-001A	OPAQUE SHEET	2				
	20	GV40331-001A	VOLUME SHEET	1				
	21	GV10101-001A	CASSETTE DOOR	1				
	22	GV40276-001A	DOOR LENS	1				
	23	GV40277-001A	DOOR SPRING	1				
	24	VKY4180-401	CASSETTE SPRING	2				
	25	GV40034-001A	DAMPER ASSY	1				
	26		SLC MECHA	1				
	27	VKL7850-002	EJECT SAFTY(R)	1				
	28	VKW5258-003	TORSION SPRING	1				
	29	GV30268-001A	MECHA BRACKET	1				
	30	QYSBSG3008Z	T.SCREW	1	M.BKT/SLC MECHA			
	31	GV40278-001A	SAFTY ARM	1				
	32	VKZ4341-204	SPECIAL SCREW	1	S.ARM/M.BRACKET			
	33	GV40279-001A	ARM SPRING	1				
	34	QYSBSF3012Z	SCREW	4	SLC./F.PANEL			
	35	GV30124-002A	TRANS SHIELD	1	0, 0,440,700, 7, 0, 115, 0			
	36	GV40170-003A	SPACER	1	SLC(MOTOR)/T.SHIELD			
	38		LOAD.BASE ASSY	1				
	39	E406293-001	SPECIAL SCREW	1	CD MECHA/LOAD.BASE			
	40	GV40196-001A	INSULATOR	2				
	41	GV40196-002A	INSULATOR	2				
	42	KSM-213CCMJ	CD MECHA ASSY	1				
	43	GV10102-001A	CLAMPER BASE	1				
	44	VYH7313-005	MAGNET	1				
	45	E306836-223SS	CD YOKE	1				
	46	VYH1240-001	TRAY	1				

# ■ Parts list (General assembly)

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$\Lambda$	Item	Parts number	Parts name		Description	Area		
	47	GV30202-001A	CD CLAMPER	1				
	48	QYSBSF3008Z	SCREW	4	CLAMP.BASE/LOAD			
	49	QYSBSF3008Z	SCREW	1	CD TRAY STOPPER			
	50	QYSBSF3008Z	SCREW	2	CD BRD/LOAD.ASSY			
	51	QYSBSF3008Z	SCREW	1	OPTICAL BRD./C.BASE			
	52	QYSDSF2610Z	TAPPING SCREW	1	TUNER/C.BASE ASSY			
	53	GV40122-003A	SPACER	1				
	54	GV30270-001A	LCD HOLDER	1				
	55	GV40280-001A	LCD LENS(A)	1				
	56	GV40281-002A	LCD LENS(B)	1				
	57	GV40282-001A	LCD SHEET	1				
	58	GV40283-001A	LED HOLDER	2				
	59	GV40211-001A	EARTH PLATE	1	INSERT TO TUNER			
	60	GV10103-001A	BOTTOM CHASSIS	1				
	61	GV40312-002A	FOOT SPACER	4	CHAS.BASE FOOT			
	62	GV30272-001A	HEAT SINK	1				
	63	GV40326-001A	MICA SHEET	1				
	64	QYSBSF3014Z	SCREW	2	IC HOL./H.SINK			
	65	QYSBSFG3016Z	SCREW	2	PWB BRD/CHA.BASE			
	66	QYSBST4006Z	T.SCREW	4	TRANS/CHA.BASE			
	67	QYSSST3008Z	SCREW	2	F.PANEL/C.BASE			
$\Lambda$	68	QMPK200-200-JD	POWER CORD	1	UX-L30R	E,EN,EV		
$\overline{\mathbb{A}}$		QMPK210-205-JN	POWER CORD	1	UX-L40R	E,EN,EV		
$\overline{\mathbb{A}}$		QMPN150-200-JC	POWER CORD	1		В		
$\overline{\mathbb{A}}$	69	QZW0033-001	STRAIN RELIEF	1				
	70	GV30271-002A	IC HOLDER	1				
	71	GV10104-001A	REAR PANEL	1				
	72	GV10105-006A	REAR COVER	1				
	73	QYSBSGY3008E	SPECIAL SCREW	1	ANT.TEM/R.PANEL			
	74	QYSBSGY3008E	SPECIAL SCREW	1	AUX.TEM/R.PANEL			
	75	QYSBSGY3010E	SPECIAL SCREW	2	R.COVER/R.PANEL			
	76	QYSBSGY3008E	SPECIAL SCREW	2	SPEAKER/R.PANEL			
	77	QYSBSGY3008E	SPECIAL SCREW	1	OPT.OUT/R.PANEL			
	78	QYSBSGY3008E	SPECIAL SCREW	2	R.PANEL/H.SINK			
	79	QYSBSGY3008E	SPECIAL SCREW	1	R.PANEL/GROUND			
	80	QYSBSGY3008E	SPECIAL SCREW	2	R.PNL/C.BASE ASSY			
	82	GV10106-003A/S/	METAL COVER	1				
	83	QYSDSG3006M	T.SCREW	2	M.COVER/C.BASE			
	84	QYSBSGY3008E	SPECIAL SCREW	6	M.COVER/R.PANEL			
	85	GV30269-001A	CD FITTING	1				
	86	GV30261-001A	VOL KNOB(B)	1	UX-L40R			
		GV30260-002A	VOL KNOB(A)	1	UX-L30R			
	87	GV30276-001A	RATING LABEL	1	UX-L30R	B,E,EN		
		GV30318-001A	RATING LABEL	1	UX-L40R	B,E,EN		
		GV30318-002A	RATING LABEL	1	UX-L40R	EV		
		GV30276-002A	RATING LABEL	1	UX-L30R	EV		
	89	QUQ412-0914CJ	FFC WIRE	1	UX-L30R FC33			
		QUQH12-0914AJ	FFC WIRE	1	UX-L40R FC33			

# ■ Parts list (General assembly)

### Block No. M1MM

$\Lambda$	Item	Parts number	Parts name	Q'ty	Description	Area
	90	QUQH12-1018AJ	FFC WIRE	1	UX-L40R FC34	
		QUQ412-1018CJ	FFC WIRE	1	UX-L30R FC34	
	91	QUQ412-1314DJ	FFC WIRE	1	UX-L30R FC652	
		QUQH12-1314BJ	FFC WIRE	1	UX-L40R FC652	
	92	QUQH12-1614BJ	FFC WIRE	1	UX-L40R FC651	
		QUQ412-1614DJ	FFC WIRE	1	UX-L30R FC651	
	93	QUQH12-0507BJ	FFC WIRE	1	UX-L40R FC631	
		QUQ412-0507DJ	FFC WIRE	1	UX-L30R FC631	
	94	QUQH12-1332BJ	FFC WIRE	1	UX-L40R FC1	
		QUQ412-1332DJ	FFC WIRE	1	UX-L30R FC1	
	95	QUQ412-2314CJ	FFC WIRE	1	UX-L30R FC731	
		QUQH12-2314AJ	FLAT WIRE	1	UX-L40R FC731	
	96	QUQ412-2320CJ	FFC WIRE	1	UX-L30R FC732	
		QUQH12-2320AJ	FLAT WIRE	1	UX-L40R FC732	
	97	QUQ110-1609AJ	FFC WIRE	1	FC601	
	98	QJJ010-060801	SIN CR C-C WIRE	1	W801	
A	99	QQT0323-002	POWER TRANSF	1	T1000	
	100	GV30349-001A	SPACER	1	UX-L40R	

# **CD** loading base assembly and parts list

Block No. M D M M LOAD-JEM-2M Grease ★= G-474C ▲ = EBS0006-009B FIG A Apply grease to groove and support convex. (13) Dimension gap for motor pulley

# ■ Parts list (CD loading base)

Block No. MDMM

$\Lambda$	Item	Parts number	Parts name	Q'ty	Description	Area
	1	VYH1238-001	LODING BASE	1		
	2	MMN-6F1LB8K	MOTOR	1		
	3	QGF1201F3-05	CONNECTOR	1	CN505	
	4	QSW0472-001	SWITCH	1	S851	
	5	QYSPSPT2640Z	MINI SCREW	2		
	6	E75984-221SS	CD M.PULLEY	1		
	7	E75950-002	BELT	1		
	8	E75985-221SS	CD GEAR (1)	1		
	9	E75986-221SS	CD GEAR (2)	1	PBT	
	10	E75987-221SS	CD GEAR (3)	1		
	11	E307162-331SS	LEVER	1		
	12	E307252-331SS	CAM PLATE	1		
	13	E65923-003	TAPPING SCREW	1		
	14	VYH7787-001	LEAF SPRING	1		
	15	QYSBSF3008Z	TAPPING SCREW	1		
	16	E307179-222SM	E.BASE ASS'Y	1		
	17	E60912-005SS	SPEED NUT	1		
	18	VMW1329-102	PRINTED BOARD	1		

# **Cassette mechanism assembly and parts list**

Block No. M P M M SLC-S101M Grease ★ =EM-30L ▲ =UD-24 ■ =UD-24H2 ○ =LEN-320M ● =JC-888B ⊚ =MOBIL-1 (10) 16 1 The lower side Switch board (18) 28 (33) Head amplifier (32) board

# ■ Parts list (Cassette mechanism)

Block No. MPMM

$\Lambda$	Item	Parts number	Parts name	Q'ty	Description	Area
	1	VKS1165-00J	CHASSIS B.ASS'Y	1		
	2	VKS2274-002	REEL GEAR	2		
	3	VKW5286-002	B.T. SPRING	2		
	4	VKS5559-001	PLAY IDLE GEAR	1		
	5	VKS5595-002	BLIND	1		
	6	VKS5560-003	FR IDLE GEAR	1		
	7	LV42013-001A	EARTH SPRING	1		
	8	SLC-RP3SVM	HEAD MOUNT	1		
	9	VKY3149-002	CASSETTE SP.	1		
	10	LV31786-001A	PLAY SW LEVER	1		
	11	VKS1166-004	CONTROL CAM	1		
	12	VKW5279-002	HEAD BASE SP(R)	1		
	13	VKW5280-001	HEAD BASE SP(L)	1		
	14	LV41584-001A	BRAKE(R)	1		
	15	LV41585-002A	BRAKE(L)	1		
	16	QYSBSF2005Z	T.SCREW	1		
	17	VKS5603-00G	MAIN PULLEY ASY	1		
	18	VKS3785-001MM	FR ARM	1		
	19	VKW5284-002	SWING SPRING	1		
	20	VKS2278-003	TRIGGER ARM	1		
	21	VKW5301-001	FR SPRING	1		
	22	VKW5266-001	ELEVATOR SPRING	1		
	23	WDL214025	WASHER	1		
	24	QYSBSF2005Z	T.SCREW	1		
	25	VKS3786-00G	CLUTCH ASS'Y	1		
	26	VKF3205-00B	F.WHEEL ASSY(R)	1		
	27	WDL183425	SLIT WASHER	1		
	28	VKF3207-00B	F.WHEEL ASSY(L)	1		
	29	WDL173525-6	SLIT WASHER	1		
	30	VKZ3174-00A	DC SOLENOID	1		
	31	LV42836-001A	CAPSTAN BELT	1		
	32	MSI-5U2LWA	D.C.MOTOR ASS'Y	1		
	33	VKR4761-001	MOTOR PULLEY	1		
	34	QYSPSP2604Z	SCREW	2		Ī
	35	QYSBSF2608Z	T.SCREW	3	FOR P.W.B.	

### ■ Electrical parts list (Input board)

A	Item	Parts number	Parts name	Remarks	Area	Λ	Item	Parts number	Parts name	Remarks	Area
	CN900	QGF1201C3-10	CONNECTOR	SLC			C2820	QCBB1HK-222Y	C CAPACITOR	2200PF 10% 50V	
	CN901	QGF1205C1-09	CONNECTOR	SLC			C2821	QCBB1HK-222Y	C CAPACITOR	2200PF 10% 50V	
	CN902	QGF1205F1-13	CONNECTOR	TU(E&B ONLY)			C2822	QCBB1HK-473Y	C CAPACITOR	.047MF 10% 50V	
	CN903	QGF1205F1-13	CONNECTOR	CD			C2823	QCBB1HK-473Y	C CAPACITOR	.047MF 10% 50V	
	CN904	QGF1205F1-16	CONNECTOR	CD			C2824	QCBB1HK-473Y	C CAPACITOR	.047MF 10% 50V	
i	CN913	QGD2504C1-04Z	SOCKET	H/PHONE	j	İ	C2825	QCBB1HK-473Y	C CAPACITOR	.047MF 10% 50V	
	CN915	QGB2510J1-10	CONNECTOR	POWER AMP			C7001	QCSB1HJ-150Y	C CAPACITOR	15PF 5% 50V	
	CN916	QGB2510J1-11	CONNECTOR	POWER AMP			C7002	QCSB1HJ-120Y	C CAPACITOR	12PF 5% 50V	
	CN917	QGD2504C1-03Z	SOCKET	TRANSFORMER			C7003	QDGB1HK-102Y	C CAPACITOR		
	CN918	QGD2504C1-03Z	SOCKET				C7004	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	CN931	QGF1205C1-23	CONNECTOR	TO FRONT PANEL			C7005	QDYB1CM-103Y	C CAPACITOR		
	CN933	QGD2504C1-03Z	SOCKET	TO FRONT PANEL			C7008	QETN0JM-228Z	E CAPACITOR	2200MF 20% 6.3V	
	CN934	QGD2504C1-03Z	SOCKET	TO FRONT PANEL			C7009	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	CN935	QGF1205C1-23	CONNECTOR	TO FRONT PANEL			C7010	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2000	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V			C7011	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
ļ	C2005	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V		ļ	C7012	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C2006	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C7041	QDYB1CM-103Y	C CAPACITOR		
	C2007	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V			C7061	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C2008	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C7063	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C2009	QTE1V06-106Z	E CAPACITOR				C7101	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C2010	QTE1V06-106Z	E CAPACITOR				C7102	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C2011	QFLM1HJ-272Z	M CAPACITOR	2700PF 5% 50V			C7104	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C2012	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			C7110	QDGB1HK-102Y	C CAPACITOR		
	C2013	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			C7121	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
ł	C2014	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V	}	ļ	C7123	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C2015	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V			C7126	QDYB1CM-103Y	C CAPACITOR		
	C2016	QFVJ1HJ-154Z	MF CAPACITOR	.15MF 5% 50V			C7134	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C2017	QETC1CM-226Z	E CAPACITOR	22MF 20% 16V			C7143	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C2018	QFVJ1HJ-154Z	MF CAPACITOR	.15MF 5% 50V			C7145	QDGB1HK-102Y	C CAPACITOR C CAPACITOR		
	C2019 C2026	QFVJ1HJ-274Z QFLM1HJ-123Z	MF CAPACITOR M CAPACITOR	.27MF 5% 50V .012MF 5% 50V			C7159 C7161	QDYB1CM-103Y QCBB1HK-101Y	C CAPACITOR  C CAPACITOR	100PF 10% 50V	
	C2100	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V			D2200	1SS119-041-T2	SI DIODE	FREEWHEEL DIODE	
	C2105	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			D2201	1SS119-041-T2	SI DIODE	FREEWHEEL DIODE	
	C2106	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			D2201	1SS119-041-T2	SI DIODE	SW8V (SLC)	
	C2107	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V			D2204	1N4003S-T5	SI DIODE	SW10V (SLC)	
	C2108	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V			D2205	1SS119-041-T2	SI DIODE	011101 (020)	
	C2109	QTE1V06-106Z	E CAPACITOR	20% 001			D2206	1SS119-041-T2	SI DIODE		
	C2110	QTE1V06-106Z	E CAPACITOR				D2220	DZ6.8BSB-T2	Z DIODE		
	C2111	QFLM1HJ-272Z	M CAPACITOR	2700PF 5% 50V			D2701	1SS119-041-T2	SI DIODE		
	C2112	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		Δ	D2800	DZ24BSC-T2	DIODE		
	C2113	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			D7002	1SS119-041-T2	SI DIODE		
	C2114	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V			D7003	1SS119-041-T2	SI DIODE	RESET	
	C2115	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V			D7004	1SS119-041-T2	SI DIODE	BACK UP	
	C2116	QFVJ1HJ-154Z	MF CAPACITOR	.15MF 5% 50V			D7005	1SS119-041-T2	SI DIODE	US5V	
ĺ	C2117	QETC1CM-226Z	E CAPACITOR	22MF 20% 16V			D7006	1SS119-041-T2	SI DIODE		
	C2118	QFVJ1HJ-154Z	MF CAPACITOR	.15MF 5% 50V			D7007	DZ5.1BSB-T2	Z DIODE		
	C2119	QFVJ1HJ-274Z	MF CAPACITOR	.27MF 5% 50V			D7008	DZ6.2BSC-T2	Z DIODE		
	C2126	QFLM1HJ-123Z	M CAPACITOR	.012MF 5% 50V			D7009	1SS119-041-T2	SI DIODE		
ļ	C2200	QETM1EM-228	E CAPACITOR	2200MF 20% 25V			D7010	1SS119-041-T2	SI DIODE		
	C2211	QDYB1CM-103Y	C CAPACITOR				D7061	1SS119-041-T2	SI DIODE		
	C2212	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V			D7062	1SS119-041-T2	SI DIODE		
	C2213	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V			D7071	1SS119-041-T2	SI DIODE		
	C2215	QETN1CM-226Z	E CAPACITOR	22MF 20% 16V			IC901	LC75345M-X	IC		
	C2221	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V			IC931	MN101C38CEK1	IC	SYSTEM MICOM	
	C2222	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V			IC932	KIA78S06P-T	IC	US6V REG	
	C2223	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			IH901	VYH7653-003	IC HOLDER		
	C2228	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			IH931	VYH7653-001	IC HOLDER	IC CLAMP	
	C2236	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			J 900	QNN0215-001	PIN JACK		
	C2239	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V			JA940	QNB0117-001	SPK TERMINAL		
	C2500	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V			K2200	QQR0621-001Z	FERRITE BEADS		
	C2502	QDYB1CM-103Y	C CAPACITOR				K7001	QQR0621-001Z	FERRITE BEADS		
	C2701	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V			K7002	QQR0621-001Z	FERRITE BEADS		
	C2702	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	1		K7003	QQR0621-001Z	FERRITE BEADS		

### ■ Electrical parts list (Input board)

_		ai parts iist (inpu	it board)	BIOCK NO. UI			1	1	1	ı	
Δ	Item	Parts number	Parts name	Remarks	Area	Λ	Item	Parts number	Parts name	Remarks	Area
	L2500	QQL231K-820Y	INDUCTOR				R2140	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	L2501	QQL231K-820Y	INDUCTOR				R2141	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	L2800	QQR0797-001	INDUCTOR	SPK EMI FILTER			R2147	QRE141J-154Y	C RESISTOR	150K 5% 1/4W	
	L2801	QQR0797-001	INDUCTOR	SPK EMI FILTER			R2200	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	L7001	QQL231K-100Y	INDUCTOR	US5V		ļ	R2201	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	ļ
	L7002	QQL231K-470Y	INDUCTOR	AVDD & VDD			R2202	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	L7003	QQL231K-4R7Y	INDUCTOR	AVREF			R2207	QRE141J-513Y	C RESISTOR	51K 5% 1/4W	
	Q2200	KRA101M-T	TRANSISTOR				R2208	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	Q2201	2SC3576-JVC-T	TRANSISTOR				R2216	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	Q2202	2SC3576-JVC-T	TRANSISTOR				R2218	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	Q2209	2SC3576-JVC-T	TRANSISTOR				R2221	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	Q2210	2SC3576-JVC-T	TRANSISTOR				R2222	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	Q2211	2SC2001/LK/-T	TRANSISTOR				R2224	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	Q2217	KRA102M-T	D TRANSISTOR				R2228	QRE141J-334Y	C RESISTOR	330K 5% 1/4W	
	Q2219	2SC3576-JVC-T	TRANSISTOR				R2233	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
ļ	Q2220	2SC3576-JVC-T	TRANSISTOR			ļ	R2500	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	<u> </u>
	Q2222	KRC104M-T	D TRANSISTOR				R2501	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	Q2800	KTC3199/GL/-T	TRANSISTOR				R2502	QRE141J-1R0Y	C RESISTOR	1.0 5% 1/4W	
	Q7001	KTA1267/YG/-T	TRANSISTOR	SW5V			R2503	QRE141J-1R0Y	C RESISTOR	1.0 5% 1/4W	
	Q7002	KRC111M-T	TRANSISTOR	RESET SW			R2702	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	Q7003	2SC2785/FE/-T	TRANSISTOR	BACKUP CONT			R2703	QRE141J-302Y	C RESISTOR	3.0K 5% 1/4W	
	Q7031	2SC2785/FE/-T	TRANSISTOR TRANSISTOR	POUT SW PHOTO BUFFER			R2712	QRE141J-563Y	C RESISTOR C RESISTOR	56K 5% 1/4W	
	Q7041	2SC2785/FE/-T					R2800	QRE141J-152Y		1.5K 5% 1/4W	
	Q7061 Q7062	KRC111M-T KRC111M-T	TRANSISTOR TRANSISTOR	TUNER SW TUNER SW		A	R2801 R2802	QRE141J-330Y QRL01DJ-471X	C RESISTOR OMF RESISTOR	33 5% 1/4W 470 5% 1W	
i	Q7002 Q7091	KRC111M-T	TRANSISTOR	UX-L40R		7:3	R2803	QRE141J-100Y	C RESISTOR	10 5% 1/4W	! 
	Q7092	KTA1267/YG/-T	SI TRANSISTOR	UX-L40R			R2820	QRE141J-4R7Y	C RESISTOR	4.7 5% 1/4W	
	RY901	QSK0109-001	RELAY	SPEAKER RELAY			R2821	QRE141J-4R7Y	C RESISTOR	4.7 5% 1/4W	
	R2000	QRE141J-303Y	C RESISTOR	30K 5% 1/4W			R7002	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2001	QRE141J-303Y	C RESISTOR	30K 5% 1/4W			R7003	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R2006	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W			R7004	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2007	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W			R7005	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2008	QRE141J-912Y	C RESISTOR	9.1K 5% 1/4W			R7006	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R2010	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W			R7007	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R2011	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W			R7008	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R2012	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W			R7041	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R2013	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W			R7042	QRE141J-394Y	C RESISTOR	390K 5% 1/4W	
	R2014	QRE141J-303Y	C RESISTOR	30K 5% 1/4W			R7043	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R2015	QRE141J-473Y	C RESISTOR	47K 5% 1/4W			R7062	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R2016	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W			R7064	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2017	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W			R7075	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2032	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W			R7076	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R2038	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W			R7077	QRE141J-913Y	C RESISTOR	91K 5% 1/4W	
	R2039	QRE141J-103Y	C RESISTOR	10K 5% 1/4W		-	R7078	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R2040	QRE141J-471Y	C RESISTOR	470 5% 1/4W			R7079	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R2041	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W			R7091	QRE141J-103Y	C RESISTOR	UX-L40R	
	R2047	QRE141J-154Y	C RESISTOR	150K 5% 1/4W			R7092	QRE141J-473Y	C RESISTOR	UX-L40R	
	R2100	QRE141J-303Y	C RESISTOR	30K 5% 1/4W			R7093	QRE141J-102Y	C RESISTOR	UX-L40R	
1	R2101	QRE141J-303Y	C RESISTOR	30K 5% 1/4W			R7101	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R2106	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W			R7102	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R2107	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W			R7103	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R2108	QRE141J-912Y	C RESISTOR	9.1K 5% 1/4W			R7104	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R2110	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W			R7105	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2111	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W			R7106	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R2112	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W			R7107	QRE1411-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2113	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W			R7108	QRE1411-563Y	C RESISTOR	56K 5% 1/4W	
	R2114 R2115	QRE141J-303Y QRE141J-473Y	C RESISTOR C RESISTOR	30K 5% 1/4W 47K 5% 1/4W			R7109 R7110	QRE141J-222Y QRE141J-103Y	C RESISTOR C RESISTOR	2.2K 5% 1/4W 10K 5% 1/4W	
	R2116	QRE141J-473Y QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W			R7111	QRE141J-103Y	C RESISTOR	2.2K 5% 1/4W	
	R2116	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W			R7111	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W 2.2K 5% 1/4W	
	R2117	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W			R7113	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2138	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W			R7114	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2139	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R7115	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
ш	. 12 100	G.1E1710 1001	0.120101011				117 113	Q.1E1710-1001	0.12001011	. 5/1 5/5 1/- 1/4 1	

■ Electrical parts list (Input board)

Block No. 01

$\wedge$	Item	Parts number	Parts name	Remarks	Area
	R7116	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7117	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
İ	R7118	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7119	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R7120	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7121	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7122	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
Ì	R7123	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7124	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7125	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7126	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7127	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7128	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7129	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7130	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7131	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7132	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7133	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7134	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7135	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7136	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7137	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7138	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7139	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7140	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7141	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7142	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7143	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7144	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7145	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7146	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7147	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R7148	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7149	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7150	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7151	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
ļ	R7152	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7153	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7154	QRE141J-222Y	C RESISTOR	UX-L30R	
	R7154	QRE141J-102Y	C RESISTOR	UX-L40R	
	R7155	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7156	QRE141J-102Y	C RESISTOR	UX-L40R	
	R7156	QRE141J-222Y	C RESISTOR	UX-L30R	
	R7157	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7158	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R7159	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7160	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7162	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7163	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7164	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R7165	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7166	QRE141J-105Y	C RESISTOR	1.0M 5% 1/4W	
	R7167	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R7800	QRE141J-103Y	C RESISTOR	UX-L30R	
	R7801	QRE141J-103Y	C RESISTOR	UX-L40R	
Щ	X7001	QAX0320-001Z	CRYSTAL	MAIN CLOCK	

### ■ Electrical parts list (Main board)

Block No. 02

Δ	Item	Parts number	Parts name	Remarks	Area	Λ	Item	Parts number	Parts name	Remarks	Area
	CN731	QGF1201F3-23	CONNECTOR				C7351	QDYB1CM-103Y	C CAPACITOR		
	CN732	QGF1201F3-23	CONNECTOR				C7352	QDYB1CM-103Y	C CAPACITOR		
	CN905	QGA2501F1-03	CONNECTOR				C7501	QEKC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	CN944	QGB2510K2-11	CONNECTOR				C7503	QDGB1HK-102Y	C CAPACITOR		
	CN945	QGB2510K2-10	CONNECTOR				C7506	QDYB1CM-103Y	C CAPACITOR		
	CN951	QGD2504C1-03Z	SOCKET			İ	C7507	QDYB1CM-103Y	C CAPACITOR		İ
	C1000	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			DI730	QLD0214-001	LCD MODULE	LCD DISPLAY	
	C1001	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		$\Lambda$	D1000	1N4003S-T5	SI DIODE		
	C1002	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		$\Lambda$	D1001	1N4003S-T5	SI DIODE		
	C1003	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		$\Lambda$	D1002	1N4003S-T5	SI DIODE		
	C1004	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		$\Lambda$	D1003	1N4003S-T5	SI DIODE		
	C1005	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		$\mathbf{\Lambda}$	D1004	1N5401-TM	DIODE		
	C1006	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		⚠	D1005	1N5401-TM	DIODE		
	C1007	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		⚠	D1006	1N5401-TM	DIODE		
Λ	C1008	QCZ9105-472	C CAPACITOR	4700PF		Λ	D1007	1N5401-TM	DIODE		
	C1009	QFLM1HJ-472Z	M CAPACITOR	4700PF 5% 50V		ļ	D1008	1SS119-041-T2	SI DIODE		
	C1010	EETC1CM-477ZJC	E CAPACITOR				D1009	1N4003S-T5	SI DIODE		
	C1011	QETB1EM-108	E CAPACITOR	1000MF 20% 25V			D1011	DZ6.8BSB-T2	Z DIODE		
	C1012	EETC1HM-106ZJC	E CAPACITOR				D1012	1SS119-041-T2	SI DIODE		
	C4000	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V			D1013	DZ5.1BSB-T2	Z DIODE		
	C4001	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V			D4000	1SS119-041-T2	SI DIODE		
	C4002	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V			D4001	1SS119-041-T2	SI DIODE		
	C4004	QETC1HM-226Z	E CAPACITOR	22MF 20% 50V			D4002	1SS119-041-T2	SI DIODE		
	C4005	QETC1HM-226Z	E CAPACITOR	22MF 20% 50V		١.	D4003	1SS119-041-T2	SI DIODE		
	C4006	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V		Δ	D4005	DZ2.4BSB-T2	Z DIODE	UX-L40R	
	C4007	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V		Δ	D4006	DZ11BSB-T2	Z DIODE	UX-L40R	
	C4008	QETC1HM-476Z	E CAPACITOR	47MF 20% 50V		Δ	D4009	DZ5.1BSB-T2	Z DIODE		
	C4009	QETC1HM-476Z	E CAPACITOR	47MF 20% 50V			D4218	1SS119-041-T2	SI DIODE		
	C4010	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V		<u> </u>	D4219	DZ8.2BSC-T2	Z DIODE		
	C4011	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V		A	D4220	DZ11BSB-T2	Z DIODE		
	C4012	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V		Δ	D4221	DZ11BSB-T2	Z DIODE		
	C4013	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V			D7322	QLMP-AD49	LED	BACKLIGHT	
	C4014	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			D7323	QLMP-AD49	LED	BACKLIGHT	
	C4015	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			D7325	QLMP-AD49	LED	BACKLIGHT	
	C4016	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			D7362	DZ10BSC-T2	Z DIODE		
	C4017	QFLM1HJ-104Z QETC1HM-106Z	M CAPACITOR	.10MF 5% 50V			D7363	DZ10BSC-T2	Z DIODE		
	C4018		E CAPACITOR	10MF 20% 50V			D7365	DZ10BSC-T2	Z DIODE		
	C4019 C4020	QETC1HM-106Z QETM1HM-228	E CAPACITOR E CAPACITOR	10MF 20% 50V UX-L30R			D7501 D7502	1SS119-041-T2 SLR-342MC-T	SI DIODE LED	GREEN LED	
	C4020	QEZ0570-228	AL E CAPACITOR	UX-L40R			D7502	SLR-342WC-T	LED	RED LED	
	C4021	QEZ0570-228	AL E CAPACITOR	UX-L40R			EP940	E409182-001SM	GRAND TERMINAL	HED EED	
	C4021	QETM1HM-228	E CAPACITOR	UX-L30R			FW500	QUM154-15DGZ4	PARA RIBON WIRE		
	C4028	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V			FW750	QUM026-11DGZ4	FLAT WIRE		
	C4029	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V			FW945	QUM153-16DGZ4	FLAT WIRL	POWER TO TRANS	
	C4030	QETC1HM-226Z	E CAPACITOR	22MF 20% 50V		İ	FW950	QUM156-16DGZ4	PARA RIBON WIRE		
	C4031	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%		Δ	F1000	QMF51W2-1R0-J8	FUSE		
	C4036	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V		<u></u>	F1001	QMF51W2-1R25-J8	FUSE		
	C4037	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V		1	IC750	GP1UM261XK	IR DETECT UNIT		
	C4038	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V		$\Lambda$	IC940	TDA7294	IC		
	C4039	QETN1HM-224Z	E CAPACITOR	UX-L40R	İ	Λ	IC941	TDA7294	IC		
	C4040	QETC1HM-105Z	E CAPACITOR	UX-L40R		$\Lambda$	IC942	L4909	REGULATOR IC		
	C4201	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V			J 902	GP1FA550TZ	OPT TRANSMITTER	OPTICAL JACK	
	C4202	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			JS731	QSW0975-001	ROTARY ENCODER	VOLUME	
	C4203	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V		⚠	J1000	QGA7901C1-02	CONNECTOR		
	C4204	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V			J5000	QNS0170-001	JACK		
	C4205	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V			K5022	QQR0621-001Z	FERRITE BEADS		
	C4206	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V		$\Lambda$	L1000	QQR1145-001	LINE FILTER		
	C4222	QFVJ1HJ-334Z	MF CAPACITOR	.33MF 5% 50V			L4000	QQLZ035-R39	INDUCTOR		
	C4223	QFVJ1HJ-334Z	MF CAPACITOR	.33MF 5% 50V			L4001	QQLZ035-R39	INDUCTOR		
	C5010	QDYB1CM-103Y	C CAPACITOR				L5030	QQL231K-470Y	INDUCTOR		
	C5011	QDYB1CM-103Y	C CAPACITOR				L5033	QQL231K-470Y	INDUCTOR		
	07000	QDYB1CM-103Y	C CAPACITOR			1	Q1000	2SC2785/FE/-T	TRANSISTOR		
	C7303										

### ■ Electrical parts list (Main board)

Block No. 02

		ai parts list (Maii			
Λ	Item	Parts number	Parts name	Remarks	Area
	Q1002	KTC3199/GL/-T	TRANSISTOR		
	Q4000	2SC3576-JVC-T	TRANSISTOR		
	Q4001	2SC3576-JVC-T	TRANSISTOR		
	Q4002	KRA102M-T	D TRANSISTOR		
ļ	Q4003	KTC3199/GL/-T	TRANSISTOR		
	Q4004	KTA1267/YG/-T	TRANSISTOR		
	Q4005	KTC3199/GL/-T	TRANSISTOR		
	Q4006	2SK301/PQ/-T	FET	UX-L40R	
	Q7500	KRC111M-T	TRANSISTOR		
Δ	RY940	QSK0124-001	RELAY	0.01/.50/.4/414	
	R1001	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R1002 R1003	QRE141J-821Y QRE141J-103Y	C RESISTOR C RESISTOR	820 5% 1/4W 10K 5% 1/4W	
	R1003	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1004	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4000	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
İ	R4001	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R4002	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4003	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4004	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4005	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4006	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R4007	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
A	R4008	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
$\Lambda$	R4009	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
	R4010	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R4011	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R4012	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4013	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
⚠	R4014	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R4015	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R4016	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
A	R4017	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
A	R4018	QRT01DJ-R22X	MF RESISTOR	5% 1/1W	
Δ	R4019	QRT01DJ-R22X	MF RESISTOR	5% 1/1W	
	R4022	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4023	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4026	QRE141J-103Y	C RESISTOR C RESISTOR	10K 5% 1/4W	
	R4027 R4028	QRE141J-103Y QRE141J-301Y	C RESISTOR C RESISTOR	10K 5% 1/4W 300 5% 1/4W	
	R4029	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R4030	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R4030	QRE141J-104Y QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4032	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
İ	R4033	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R4034	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4035	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4036	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
$\Lambda$	R4037	QRZ9006-4R7X	F RESISTOR	4.7 1W	
	R4038	QRE141J-105Y	C RESISTOR	UX-L40R	
	R4039	QRE141J-105Y	C RESISTOR	UX-L40R	
	R4040	QRE141J-473Y	C RESISTOR	UX-L40R	
	R4041	QRE141J-153Y	C RESISTOR	UX-L40R	
	R4042	QRE141J-152Y	C RESISTOR	UX-L40R	
	R4043	QRE141J-103Y	C RESISTOR	UX-L40R	
	R4044	QRE141J-821Y	C RESISTOR	UX-L40R	
	R4045	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	
	R4200	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R4201	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	R4202	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4203	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4204	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
Щ	R4205	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W	

Λ	Item	Parts number	Parts name	Remarks	Area
	R4206	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4207	QRE141J-820Y	C RESISTOR	82 5% 1/4W	
	R4209	QRE141J-820Y	C RESISTOR	82 5% 1/4W	
	R7310	QRE141J-301Y	C RESISTOR	300 5% 1/4W	
	R7311	QRE141J-301Y	C RESISTOR	300 5% 1/4W	
İ	R7313	QRE141J-301Y	C RESISTOR	300 5% 1/4W	İ
	R7320	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7321	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7322	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R7323	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R7324	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7325	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R7326	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R7327	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R7501	QRE141J-161Y	C RESISTOR	160 5% 1/4W	
ļ	R7502	QRE141J-470Y	C RESISTOR	47 5% 1/4W	
	R7503	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7504	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7505	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R7506	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R7507	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7508	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R7509	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R7511	QRE141J-433Y	C RESISTOR	43K 5% 1/4W	
ļ	S7302	QSW0825-001Z	TACT SWITCH	CD	 
	S7303	QSW0825-001Z	TACT SWITCH	TAPE	
	S7304	QSW0825-001Z	TACT SWITCH	FM/AM	
	S7305	QSW0825-001Z	TACT SWITCH	TREBLE	
	S7306	QSW0825-001Z	TACT SWITCH	FF	
	S7307	QSW0825-001Z	TACT SWITCH	STOP	
	S7308	QSW0825-001Z	TACT SWITCH	REV	
	S7309	QSW0825-001Z	TACT SWITCH	BASS	
	S7500	QSW0825-001Z	TACT SWITCH	POWER	
	S7501	QSW0825-001Z	TACT SWITCH	REC	
	S7502	QSW0825-001Z	TACT SWITCH	REV.MODE	
	S7503	QSW0825-001Z	TACT SWITCH	AHB PRO	
	S7504	QSW0825-001Z	TACT SWITCH	CLOCK/TIMER	
	S7505	QSW0825-001Z	TACT SWITCH	AUX	
Λ	S7506	QSW0825-001Z	TACT SWITCH	OPEN/CLOSE	
/!\	T1001	QQT0253-002	POWER TRANS		
	Z1000	QNG0003-001Z	FUSE CLIP		
	Z1001	QNG0003-001Z	FUSE CLIP		
	Z1002	QNG0003-001Z	FUSE CLIP		
	Z1003	QNG0003-001Z	FUSE CLIP	I.	l

### ■ Electrical parts list (CD board)

_	1	ai parts list (CD i	· · · · · · · · · · · · · · · · · · ·			_	1		1	T	
Δ	Item	Parts number	Parts name	Remarks	Area	Λ	Item	Parts number	Parts name	Remarks	Area
	C 601	NCB31CK-104X	C CAPACITOR				CN651	QGF1205F1-16	CONNECTOR		
	C 602	NCB31HK-222X	C CAPACITOR				CN652	QGF1205F1-13	CONNECTOR		
	C 603	NCB31HK-223X	C CAPACITOR				CN801	QGA2001C1-06	6P PLUG ASSY		
	C 604	NCB31HK-223X	C CAPACITOR				D 601	MA111-X	DIODE C		
	C 605	NCS31HJ-391X	C CAPACITOR				D 602	MA111-X	DIODE C		
	C 606	NCS31HJ-820X	C CAPACITOR				D 831	DZ5.6BSB-T2	Z DIODE		
	C 610	NCB31CK-273X	C CAPACITOR				IC601	AN22000A-W	IC		
	C 612	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			IC651	MN662748RPMFA	IC		
	C 613	NCB31AK-224X	C CAPACITOR				IC801	LA6541-X	IC		
	C 614	NCB31CK-273X	C CAPACITOR				IC802	LB1641	IC		
	C 615	NCB31HK-472X	C CAPACITOR				L 831	QQL244K-100Z	INDUCTOR		
	C 616	NCB31HK-103X	C CAPACITOR				Q 631	2SB709A/QR/-X	TRANSISTOR		
	C 617	NCS31HJ-331X	C CAPACITOR				Q 801	KTA1271/OY/-T	TRANSISTOR		
	C 619	NCS31HJ-330X	C CAPACITOR				R 601	NRSA63J-274X	MG RESISTOR		
	C 621	NCF31AZ-105X	C CAPACITOR				R 602	NRSA63J-684X	MG RESISTOR		
	C 622	NCB31CK-473X	C CAPACITOR				R 603	NRSA63J-433X	MG RESISTOR		
i	i					İ	R 604	i	i		
	C 623	NCF31AZ-105X	C CAPACITOR	100ME 000/ C 0V				NRSA63J-184X	MG RESISTOR		
	C 624	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V			R 605	NRSA63J-472X	MG RESISTOR		
	C 631	QERF1CM-106Z	E CAPACITOR	10MF 20% 16V			R 606	NRSA63J-472X	MG RESISTOR		
	C 632	NCF31AZ-105X	C CAPACITOR				R 607	NRSA63J-623X	MG RESISTOR		
	C 633	NCB31HK-223X	C CAPACITOR				R 610	NRSA63J-223X	MG RESISTOR		
	C 641	NCB31CK-473X	C CAPACITOR				R 611	NRSA63J-223X	MG RESISTOR		
	C 642	NCB31HK-472X	C CAPACITOR				R 612	NRSA63J-822X	MG RESISTOR		
	C 643	NCS31HJ-821X	C CAPACITOR				R 613	NRSA63J-472X	MG RESISTOR		
ļ.	C 651	NCS31HJ-120X	C CAPACITOR		ļ	ļ	R 615	NRSA63J-472X	MG RESISTOR		
	C 652	NCS31HJ-120X	C CAPACITOR				R 616	NRSA63J-472X	MG RESISTOR		
	C 653	NCB31CK-104X	C CAPACITOR				R 617	NRSA63J-472X	MG RESISTOR		
	C 654	NCS31HJ-151X	C CAPACITOR				R 631	NRSA63J-2R2X	MG RESISTOR		
	C 655	NCB31CK-104X	C CAPACITOR				R 632	NRSA63J-100X	MG RESISTOR		
	C 656	NCB31CK-104X	C CAPACITOR				R 634	NRSA63J-120X	MG RESISTOR		
	C 657	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V			R 635	NRSA63J-121X	MG RESISTOR		
	C 658	NCB31CK-104X	C CAPACITOR				R 636	NRSA63J-910X	MG RESISTOR		
	C 661	NCS31HJ-471X	C CAPACITOR				R 641	NRSA63J-154X	MG RESISTOR		
	C 663	NCB31HK-223X	C CAPACITOR				R 642	NRSA63J-564X	MG RESISTOR		
	C 664	NCB31HK-223X	C CAPACITOR				R 643	NRSA63J-153X	MG RESISTOR		
	C 665	NCB31AK-154X	C CAPACITOR				R 647	NRSA63J-0R0X	MG RESISTOR		
	C 669	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V			R 651	NRSA63J-102X	MG RESISTOR		
	C 670	NCS31HJ-151X	C CAPACITOR				R 652	NRSA63J-102X	MG RESISTOR		
	C 671	NCS31HJ-151X	C CAPACITOR				R 653	NRSA63J-102X	MG RESISTOR		
	C 672	NCS31HJ-151X	C CAPACITOR				R 654	NRSA63J-101X	MG RESISTOR		
	C 673	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V			R 655	NRSA63J-102X	MG RESISTOR		
	C 676	NCB31CK-104X	C CAPACITOR				R 656	NRSA63J-102X	MG RESISTOR		
	C 677	NCB31CK-104X	C CAPACITOR				R 657	NRSA63J-0R0X	MG RESISTOR		
	C 679	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V			R 658	NRSA63J-0R0X	MG RESISTOR		
i	C 680	NCB31CK-104X	C CAPACITOR	. 55 20/0 0.00		Ì	R 659	NRSA63J-0R0X	MG RESISTOR		
	C 681	NCB31AK-334X	C CAPACITOR				R 661	NRSA63J-393X	MG RESISTOR		
	C 693	NCB31HK-222X	C CAPACITOR				R 662	NRSA63J-683X	MG RESISTOR		
	C 694	NCB31HK-222X	C CAPACITOR				R 663	NRSA63J-124X	MG RESISTOR		
	C 801	NCB31HK-682X	C CAPACITOR			ł	R 664	NRSA63J-331X	MG RESISTOR		]
	C 802	NCB31HK-472X	C CAPACITOR				R 665	NRSA63J-271X	MG RESISTOR		
	C 811	NCS31HJ-391X	C CAPACITOR				R 666	NRSA63J-221X	MG RESISTOR		
	C 812	NCS31HJ-391X	C CAPACITOR				R 667	NRSA63J-4R7X	MG RESISTOR		
	C 813	NCS31HJ-391X	C CAPACITOR				R 670	NRSA63J-101X	MG RESISTOR		
	C 814	NCS31HJ-391X	C CAPACITOR				R 681	NRSA63J-272X	MG RESISTOR		
	C 821	NCF31AZ-105X	C CAPACITOR				R 682	NRSA63J-102X	MG RESISTOR		
	C 822	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V			R 683	NRSA63J-105X	MG RESISTOR		
	C 823	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V			R 684	NRSA63J-155X	MG RESISTOR		
	C 824	NCB31HK-222X	C CAPACITOR				R 691	NRSA63J-102X	MG RESISTOR		
	C 831	QEKJ1CM-107Z	E CAPACITOR	100MF 20% 16V			R 692	NRSA63J-102X	MG RESISTOR		
	C 832	NCB31HK-103X	C CAPACITOR				R 801	NRSA63J-272X	MG RESISTOR		
	C 833	NCB31CK-104X	C CAPACITOR				R 802	NRSA63J-472X	MG RESISTOR		
	CN601	QGF1016F1-16	CONNECTOR				R 803	NRSA63J-472X	MG RESISTOR		
	CN606	QGF1205F1-05	CONNECTOR			L	R 804	NRSA63J-823X	MG RESISTOR		<u> </u>

# UX-L40R/UX-L30R

### ■ Electrical parts list (CD board)

$\Lambda$	Item	Parts number	Parts name	Remarks	Area
	R 805	NRSA63J-912X	MG RESISTOR		
	R 806	NRSA63J-513X	MG RESISTOR		
	R 807	NRSA63J-392X	MG RESISTOR		
ļ	R 808	NRSA63J-563X	MG RESISTOR		
	R 821	NRSA63J-0R0X	MG RESISTOR		
	R 822	NRSA63J-473X	MG RESISTOR		
	R 831	QRE141J-100Y	C RESISTOR	10 5% 1/4W	
	W 605	QJP001-031200	3P PLUG ASSY		
	X 651	QAX0413-001Z	CRYSTAL		

#### ■ Electrical parts list (Tuner board)

Λ	Item	Parts number	Parts name	Remarks	Area	A	Item	Parts number	Parts name	Remarks	Area
	C 1	NCB21HK-223X	C CAPACITOR		04		CF 1	QAX0420-001	C FILTER		. 11 04
	C 2	NCB21HK-103X	C CAPACITOR				CF 2	QAX0458-001Z	C FILTER		
	C 3	EETC1CM-106ZJC	E CAPACITOR				CF 3	QAX0610-001Z	C DISCRIMINATOR		
	C 4	NCB21HK-103X	C CAPACITOR				CN 1	QGF1205F1-13	CONNECTOR		
	C 6	NCB21HK-102X	C CAPACITOR				D 1	1SS133-T2	SI DIODE		
	C 7	NCB21HK-102X	C CAPACITOR				D 2	1SS133-T2	SI DIODE		
	C 8	NCB21HK-102X	C CAPACITOR				D 3	1SS133-T2	SI DIODE		
	C 9	NCB21HK-102X	C CAPACITOR				D 4	1SS133-T2	SI DIODE		
	C 10	NCS21HJ-120X	C CAPACITOR				D 11	1SS133-T2	SI DIODE		
	C 11	NCB21HK-104X	C CAPACITOR				IC 1	LA1838	IC		
	C 12	NCB21HK-473X	C CAPACITOR				IC 2	LC72136N	IC (PPC)		
	C 13	NCS21HJ-120X	C CAPACITOR				IC 3 J 1	LC72723 QNB0014-001	IC(RDS) ANT TERMINAL		
	C 14	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V			L 1	QQR1094-001	COIL BLOCK		
	C 15	NCS21HJ-120X	C CAPACITOR				L 2	QQL231K-330Y	INDUCTOR		
	C 16	NCS21HJ-120X	C CAPACITOR				L 3	QQL231K-4R7Y	INDUCTOR		
ļ	C 17	NCB21HK-392X	C CAPACITOR				L 70	QQL231K-101Y	INDUCTOR		
	C 18	QEQ61HM-474Z	NP E CAPACITOR	.47MF 20% 50V			Q 1	2SC2814/4-5/-X	TRANSISTOR		
	C 19	NCB21HK-473X	C CAPACITOR				Q 2	2SD601A/QR/-X	TRANSISTOR		
	C 20	NCB21HK-102X	C CAPACITOR				Q 3	2SD601A/QR/-X	TRANSISTOR		
ļ	C 21	NCB21HK-223X	C CAPACITOR				Q 4	KRA107S-X	TRANSISTOR		
	C 22	NCS21HJ-151X	C CAPACITOR				Q 5	KRA107S-X	TRANSISTOR		
	C 23	NCS21HJ-151X	C CAPACITOR				R 2	NRSA02J-331X	MG RESISTOR		
	C 24	NCS21HJ-151X	C CAPACITOR				R 3	NRSA02J-224X	MG RESISTOR		
	C 25	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V			R 4	NRSA02J-331X	MG RESISTOR		
ļ	C 26	NCB21HK-103X	C CAPACITOR				R 5	NRSA02J-560X NRSA02J-120X	MG RESISTOR		
	C 27	NCB21HK-103X	C CAPACITOR				R 6 R 10	NRSA02J-120X NRSA02J-222X	MG RESISTOR MG RESISTOR		
	C 30	EEKC1CM-107ZJC	E CAPACITOR				R 11	NRSA02J-472X	MG RESISTOR		
	C 31	EEKC1CM-226ZJC	E CAPACITOR				R 12	NRSA02J-472X	MG RESISTOR		
	C 32	NCB21HK-473X	C CAPACITOR				R 13	NRSA02J-103X	MG RESISTOR		
	C 33	NCB21HK-473X	C CAPACITOR				R 14	NRSA02J-104X	MG RESISTOR		
	C 34	NCB21HK-223X	C CAPACITOR				R 15	NRSA02J-332X	MG RESISTOR		
	C 35	NCB21HK-473X	C CAPACITOR				R 16	NRSA02J-472X	MG RESISTOR		
	C 36	EEKC1HM-105ZJC	E CAPACITOR			⚠	R 17	QRZ9005-680X	F RESISTOR	68 1W	
	C 37	EEKC1HM-105ZJC	E CAPACITOR				R 18	NRSA02J-102X	MG RESISTOR		
	C 38 C 39	EETC1HM-224ZJC EETC1HM-105ZJC	E CAPACITOR E CAPACITOR				R 19	NRSA02J-102X	MG RESISTOR		
	C 40	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V			R 20	NRSA02J-102X	MG RESISTOR		
	C 41	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V			R 21	NRSA02J-562X	MG RESISTOR		
	C 42	NCB21HK-182X	C CAPACITOR	10W1 2070 10V			R 22 R 23	NRSA02J-472X	MG RESISTOR		
	C 43	NCB21HK-182X	C CAPACITOR				R 24	NRSA02J-182X NRSA02J-103X	MG RESISTOR MG RESISTOR		
	C 44	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V			R 25	NRSA02J-331X	MG RESISTOR		
	C 45	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V			R 26	NRSA02J-222X	MG RESISTOR		
	C 46	NCB21HK-223X	C CAPACITOR	20,72 7.07			R 27	NRSA02J-103X	MG RESISTOR		
	C 47	EETC1HM-105ZJC	E CAPACITOR				R 28	NRSA02J-103X	MG RESISTOR		
İ	C 48	NCB21HK-222X	C CAPACITOR	İ			R 29	NRSA02J-103X	MG RESISTOR		
	C 49	NCS21HJ-471X	C CAPACITOR				R 30	NRSA02J-122X	MG RESISTOR		
	C 50	EEKC1CM-226ZJC	E CAPACITOR				R 31	NRSA02J-102X	MG RESISTOR		
	C 51	EEKC1HM-105ZJC	E CAPACITOR				R 32	NRSA02J-102X	MG RESISTOR		
	C 52	QFVJ1HJ-274Z	MF CAPACITOR	.27MF 5% 50V			R 33	NRSA02J-331X	MG RESISTOR		
	C 53	EETC1CM-226ZJC	E CAPACITOR				R 34	NRSA02J-470X	MG RESISTOR		
	C 54	NCB21HK-473X	C CAPACITOR	ļ	j		R 35	NRSA02J-562X	MG RESISTOR		
	C 55	NCS21HJ-330X	C CAPACITOR				R 36	NRSA02J-332X	MG RESISTOR		
	C 56	NCS21HJ-100X	C CAPACITOR				R 37 R 38	NRSA02J-103X NRSA02J-393X	MG RESISTOR MG RESISTOR		
	C 57	NCB21HK-102X	C CAPACITOR				R 39	NRSA02J-393X NRSA02J-393X	MG RESISTOR		
	C 58	NCB21HK-473X	C CAPACITOR				R 40	NRSA02J-393X	MG RESISTOR		
	C 59	NCB21HK-102X	C CAPACITOR				R 41	NRSA02J-332X	MG RESISTOR		
	C 70	NCS21HJ-220X	C CAPACITOR				R 60	NRSA02J-0R0X	MG RESISTOR		
	C 71	NCS21HJ-220X	C CAPACITOR				R 72	NRSA02J-102X	MG RESISTOR		
	C 72	NCB21HK-561X	C CAPACITOR				R 73	NRSA02J-102X	MG RESISTOR		
	C 73	NCB21HK-104X	C CAPACITOR				T 1	QQR0793-001	IFT		
	C 74	NCB21HK-104X	C CAPACITOR				TU 1	QAU0160-001	FRONT END		
	C 75	EETC1HM-106ZJC	E CAPACITOR				X 1	QAX0402-001	CRYSTAL		
	C 76	NCB21HK-331X	C CAPACITOR			L	X 70	QAX0263-001Z	CRYSTAL		

■ Electrical parts list (Head amplifier board)

Block No. 05

	Electrica	ical parts list (Head amplifier board)		Block No. 05	
$\Lambda$	Item	Parts number	Parts name	Remarks	Area
	C 101	NCS21HJ-821X	C CAPACITOR		
	C 102	NCS21HJ-221X	C CAPACITOR		
	C 103	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 104	NCB21HK-333X	C CAPACITOR		
	C 105	NCB21HK-222X	C CAPACITOR		
	C 106	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 107	NCS21HJ-561X	C CAPACITOR		
	C 108	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 109	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 110	NCB21HK-682X	C CAPACITOR		
	C 111	NCB21HK-152X	C CAPACITOR		
	C 113	NCB21HK-393X	C CAPACITOR		
	C 121	NCS21HJ-331X	C CAPACITOR		
	C 201	NCS21HJ-821X	C CAPACITOR		
	C 202	NCS21HJ-221X	C CAPACITOR		
ļ	C 203	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 204	NCB21HK-333X	C CAPACITOR		
	C 205	NCB21HK-222X	C CAPACITOR		
	C 206	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 207	NCS21HJ-561X	C CAPACITOR		
	C 208	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 209	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 210	NCB21HK-682X	C CAPACITOR		
	C 211	NCB21HK-152X	C CAPACITOR		
ļ	C 213	NCB21HK-393X	C CAPACITOR		l I
	C 221	NCS21HJ-331X	C CAPACITOR		
	C 301	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 302	NCB21HK-393X	C CAPACITOR	000ME 000/ 0 0V	
	C 303	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 304 C 305	QEKJ1CM-226Z QEKJ1CM-226Z	E CAPACITOR E CAPACITOR	22MF 20% 16V 22MF 20% 16V	
	C 306	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 307	NCB21HK-103X	C CAPACITOR	22/01/20/01/04	
	C 308	NCB21HK-152X	C CAPACITOR		
	C 310	NCB21HK-223X	C CAPACITOR		
	C 313	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 314	QCZ0202-155Z	ML C CAPACITOR	1.5MF	
	C 316	QFG32AJ-223Z	PP CAPACITOR	.022MF 5% 100V	
	C 319	QFLM1HJ-472Z	M CAPACITOR	4700PF 5% 50V	
	C 331	QEKJ1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 371	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 374	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 376	NCB21HK-103X	C CAPACITOR		
	CN 31	QGF1205F1-06	CONNECTOR	PRI/HEAD	
	CN 32	QGB2011M1-10	B TO B CONNECTO	PRI/MECHA	
	CN 33	QGF1205F1-09	CONNECTOR	PRI/MICON	
	CN 34	QGF1201F3-10	CONNECTOR	PRI/AMP	
	D 375	MA3051/M/-X	Z DIODE		
	FW 31	QUM024-06A2Z3	PARA RIBON WIRE		
	IC 31	BA3126N	IC	HEAD SW	
	IC 32	AN7317	IC	PB&REC	
	IC 33	BU4094BCF-X	IC		
	L 301	QQR1292-001	BIAS COIL		
	L 303	QQL244K-100Z	INDUCTOR		
	Q 302	KTC3203/Y/-T	TRANSISTOR	OSC	
	Q 305	KTC3203/Y/-T	TRANSISTOR	SW	
	Q 321	UN2213-X	TRANSISTOR	BUFFER	
	Q 371	KTA1271/OY/-T	TRANSISTOR	MOTER+B	
	Q 372	UN2212-X	TRANSISTOR		
	Q 375	2SB562/C/-T	TRANSISTOR	SOLENOID DRIVE	
	Q 376	2SD601A/QR/-X	TRANSISTOR		
	R 101	NRSA63J-220X	MG RESISTOR		
Щ	R 102	NRSA63J-182X	MG RESISTOR	<u>l</u>	l

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Δ	Item	Parts number	Parts name	Remarks	Area
	R 103	NRSA63J-242X	MG RESISTOR		
	R 104	NRSA63J-122X	MG RESISTOR		
	R 105	NRSA63J-104X	MG RESISTOR		
	R 106	NRSA63J-332X	MG RESISTOR		
	R 107	NRSA63J-123X	MG RESISTOR		ļ
	R 108	NRSA63J-562X	MG RESISTOR		
	R 109	NRSA63J-102X	MG RESISTOR		
	R 110	NRSA63J-272X	MG RESISTOR		
	R 111	NRSA63J-363X	MG RESISTOR		
	R 112	NRSA63J-222X	MG RESISTOR		
	R 116	NRSA63J-102X	MG RESISTOR		
	R 121	NRSA63J-153X	MG RESISTOR		
	R 122	NRSA63J-102X	MG RESISTOR		
	R 201	NRSA63J-220X	MG RESISTOR		
	R 202	NRSA63J-182X	MG RESISTOR		
	R 203	NRSA63J-242X	MG RESISTOR		
ĺ	R 204	NRSA63J-122X	MG RESISTOR		
	R 205	NRSA63J-104X	MG RESISTOR		
	R 206	NRSA63J-332X	MG RESISTOR		
	R 207	NRSA63J-123X	MG RESISTOR		
	R 208	NRSA63J-562X	MG RESISTOR		
	R 209	NRSA63J-102X	MG RESISTOR		
	R 210	NRSA63J-272X	MG RESISTOR		
	R 211	NRSA63J-363X	MG RESISTOR		
	R 212	NRSA63J-222X	MG RESISTOR		
İ	R 216	NRSA63J-102X	MG RESISTOR	j	İ
	R 221	NRSA63J-153X	MG RESISTOR		
	R 222	NRSA63J-102X	MG RESISTOR		
	R 301	NRS181J-221X	MG RESISTOR		
	R 303	NRSA63J-393X	MG RESISTOR		
	R 304	NRS181J-101X	MG RESISTOR		
	R 310	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W	
	R 313	NRSA63J-2R2X	MG RESISTOR		
	R 314	NRSA63J-153X	MG RESISTOR		
	R 315	NRSA63J-101X	MG RESISTOR		
	R 327	NRSA63J-474X	MG RESISTOR		
	R 335	NRSA63J-152X	MG RESISTOR		
	R 336	NRSA63J-472X	MG RESISTOR		
	R 337	NRSA63J-332X	MG RESISTOR		
	R 338	NRSA63J-392X	MG RESISTOR		
	R 339	NRSA63J-222X	MG RESISTOR		
	R 340	NRS181J-391X	MG RESISTOR		
	R 341	NRSA63J-123X	MG RESISTOR		
	R 342	NRSA63J-123X	MG RESISTOR		
! !	i		İ		ŀ
Δ	R 343	NRSA63J-183X	MG RESISTOR	10 59/ 1/4/4/	
4	R 353	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 371	NRSA63J-123X	MG RESISTOR		
	R 372	NRSA63J-102X	MG RESISTOR	1/0//	
	R 375	NRSA02J-151X	MG RESISTOR	1/8W	1
	R 376	NRSA63J-472X	MG RESISTOR	DIAC AD I	
	VR 31	QVP0008-203Z	SEMI V RESISTOR	BIAS ADJ	
	VR 37	QVP0008-103Z	SEMI V RESISTOR	TAPE SPEED ADJ	

### ■ Electrical parts list (Cassette switch board) Block No. 06

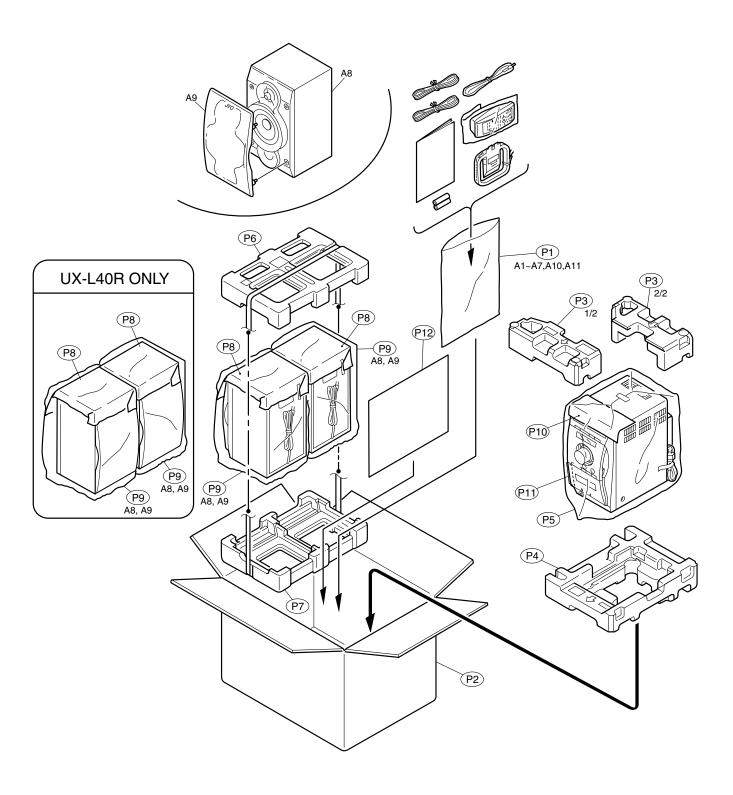
$\Lambda$	Item	Parts number	Parts name	Remarks	Area
	CN 1	QGB2011L1-10	B TO B CONNECTO		
	D 1	1T3-T2	SI DIODE		
	IC 1	SG-105F3-BB,C	PHOTO SENSER		
	P 1	QNZ0104-001	POST PIN		
ļ	SW 1	QSW0832-001	LEAF SWITCH	R.REC	
	SW 2	QSW0832-001	LEAF SWITCH	TAPE	
	SW 5	QSW0832-001	LEAF SWITCH	F.REC	
	SW 6	QSW0859-001	LEVER SWITCH		

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# Packing materials and accessories parts list

Block No. M 3 M M

Block No. M 5 M M



# ■ Parts list (Packing)

### Block No. M3MM

$\Lambda$	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	QPC02503515P	POLY BAG	1	FOR INST BOOK	
	P 2	GV20173-001A	CARTON ASSY	1	UX-L30R	
		GV20174-003A	PACKING CASE	1	UX-L40R	
	P 3	GV10116-001A	CUSHION TOP	1	UX-L40R	
		GV10107-001A	CUSHION TOP	1	UX-L30R	
	P 4	GV10108-001A	CUSHION BOTTOM	1	UX-L30R	
		GV10117-001A	BOTTOM CUSHION	1	UX-L40R	
	P 5	QPC05006515P	POLY BAG	1	FOR SET	
	P 6	720-TUXL40-00	TOP CUSHION	1	UX-L40R	
		720-TUXL30-00	TOP CUSHION	1	UX-L30R	
	P 7	720-BUXL30-00	BOTTOM CUSHION	1	UX-L30R	
		720-BUXL40-00	BOTTOM CUSHION	1	UX-L40R	
	P 8	715-250068-00	MIRAMAT SHEET	2	UX-L40R	
		715-250009-00	MIRAMAT SHEET	2	UX-L30R	
	P 9	700-120074-10	POLY BAG	2	UX-L30R FOR SPK	
		700-120073-10	POLY BAG	2	UX-L40R FOR SPK	
	P 10	GV40168-005A	SHEET	1		
	P 11	GV40341-001A	SPACER	1	CASS. DOOR/F.PANEL	
	P 12	GV40256-002A	SPACER	1	UX-L40R	

# ■ Parts list (Accessories)

### Block No. M5MM

$\triangle$	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	QAL0014-001	AM LOOP ANT	1		
	A 2	EWP503-001C	ANT.WIRE	1		
	A 3		BATTERY	2		
	A 4	RM-SUXL30R	REMOCON	1	UX-L30R	
		RM-SUXL40R	REMOCON	1	UX-L40R	
	A 5	BT-54013-2	W.CARD	1		
	A 6	VNA3000-204	REGIST.CARD	1		В
	A 7	GVT0080-008A	INST BOOK	1	ENG	В
		GVT0080-009A	INST BOOK	1	POL, CZE, HUN, RUS	EV
		GVT0080-006A	INST BOOK	1	GER, FRE, DUT	E
		GVT0080-007A	INST BOOK	1	SWE,FIN,DAN,GER,FRE,SPA,ITA	EN
	A 8	UXL30R-SPBOX	SPEAKER BOX	2	UX-L30R	
		UXL40R-SPBOX	SPEAKER BOX	2	UX-L40R	
	A 9	J201-XL4000T-10	SARAN BOARD	2	UX-L40R	
		J201-XL3000C-10	SARAN NET	2	UX-L30R	
	A 10	QAM0339-001	SPEAKER CORD	2	UX-L40R	
	A 11	GV30363-002A	CAUTION SHEET	1		EV
		GV30363-001A	CAUTION SHEET	1		B,EN,E